School of Design and the Built Environment

Desirable Dense Neighbourhoods:

An Environmental Psychological Approach for Understanding Community Resistance to Densification

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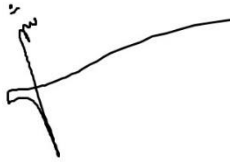
Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

The research presented and reported in this thesis was conducted in accordance with the National Health and Medical Research Council National Statement on Ethical Conduct in Human Research (2007) – updated March 2014. The proposed research study received human research ethics approvals from the Curtin University Human Research Ethics Committee (EC00262), Approval Numbers BE-77-2012 and BE-43-2014.

Signature: Shohreh Nematollahi 

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FOR BAABAK

ABSTRACT

Developing higher density areas/places in close proximity to public transport routes and town centres, is leading urban policies around the world and in particular in Western countries with low urban population densities such as the US and Australia. These policies have been proposed as a broad based sustainability strategy for addressing urban growth challenges such as the provision of diverse housing options, the reduction of car usage and the promotion of non-car mobility such as walking and cycling.

In Perth, Western Australia, as in most other major cities in Australia, a key planning objective revolves around the development of mixed use dense areas (referred to as activity centres and Transit Orientated Developments (TODs)) within the catchment areas of major transit routes such as train stations and bus interchanges.

However, challenges have emerged when the compact city planning objectives in the form of urban development projects or council's structure plans are evaluated by the local community. Community resistance to such developments has become an ongoing issue for local councils, delaying major projects and in particular those aimed at pursuing increased housing diversity.

Community opposition is frequently and stereotypically attributed to the NIMBY syndrome. This study aims to go beyond such trite rationalisations by investigating the underlying factors behind this resistance to change, by analysing the socio-psychological characteristics of local communities. Further it aims to understand the dimensions of what a community would consider a desired dense place or neighbourhood. This is conceived within the framework of a collaborative place making process built on a constructive dialogue between community and other stakeholders about generating development proposals which might harmonise with the community's perception of desirable living conditions.

Three proposed TOD areas in Perth - Canning Bridge, Cannington and Wellard - were identified as case studies to pursue the objectives of this study. Distance from CBD, demographic characteristics and density targets were the three major factors in their selection. Communities' perceptions were explored through a questionnaire to local residents. This was then followed by in depth interviews with particular individuals to pursue the prevailing issues that had been raised.

It was found that well designed medium density housing/developments are the desired dense built form, as opposed to high density, high rise apartments. Home features such as noise insulation, privacy and access to natural light were identified as the major contributing factors in providing comfortable living in a dense urban environment.

Furthermore, a socially homogenous neighbourhood was perceived as a desirable social objective of a dense neighbourhood. Fear of the unknown was mainly stated as the reason for the negative perceptions expressed concerning social diversity. Further, it was concluded that current levels of socialising between neighbours was not assisting individuals to overcome their fear of the 'social unknown'.

In the multicultural cities of Australia attitudes towards denser urban living is not constrained to the proposed functional and architectural quality of a place. Rather it is shared and in some cases underpinned by expectations of the social qualities of its likely residents and the lifestyles they are seen to embrace.

The research concludes that the planning policies and goals of the compact city will be unattainable without consideration of the social implications of dense urban living. Enhancing neighbours' social relations and increasing the cultural capacity of a community to accept diverse lifestyles will be a major factor in creating desirable dense neighbourhoods that not only reflect the housing preferences of incoming residents but are also welcomed by the collective consciousness of existing residents.

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CHAPTER 1

Introduction

Background to the study:

Urban densification has become one of the key elements of consideration in implementing planning strategies to facilitate compact city and Transit Oriented Developments (TODs), in order to develop an antidote to urban sprawl, and to create more sustainable cities in the 21st century. (Preiser, 1992; Alexander,1993, Hitchcock, 1994, Churchman, 1999; Kenworthy and Newman, 1999; Curtis, 2009; Cervero, 2009; Newman, 2009).

Australia, one of the most car-dependent and sprawling countries in the world, is also directing future urban growth towards the provision of efficient public transport, bounded by dense areas/neighbourhoods (Transit Oriented Developments). Many urban planning strategies in Sydney, Melbourne and Perth are focusing on developing Activity Centre (Transit Oriented Development) policies (Kenworthy and Newman, 1999; Randolph, 2006; Curtis, 2009; Newman, 2009), promoting non-car mobility, diversity of housing types and a mixture of uses. While the objectives of TODs', or Activity Centres' in sprawling cities seems appealing, the real challenge arises when proposals for dense developments are discussed with existing communities as part of a collaborative planning process (Rice, 2009; Rowley and Phibbs, 2012; Cook et al., 2012; Davison et al., 2013; Weller and Bolleter, 2013; Ruming, 2014; Hedgcock and Brunner, 2015).

Collaborative planning is an approach to public participation (Gunton and Day, 2003), which involves democratic decision-making by focusing on building consensus between urban policy objectives and the desires of affected stake-holders (Healey, 1997), such as local residents. However, building consensus between the community (local residents), local councils and state government agencies in regard to the concept of urban densification is a lengthy, wearing process. It creates an environment that constrains the ability of the planning system to deliver on its housing location and density targets, a key prerequisite for success of TOD and Activity Centre urban policies (Rice, 2009; Rowley and Phibbs, 2012; Cook et al., 2012; Davison et al., 2013; Weller and Bolleter, 2013; Ruming, 2014; Hedgcock and Brunner, 2015). The disagreement and strong friction between the parties also reduces trust, a key element in a successful and genuine community engagement process (Ciulla 2004 cited in Pierson, 2008; Tiwari and Pandya, 2014)

Local community opposition and resistance to dense urban development often arises during the engagement process, and is attributed to the idea of NIMBYism (Not In My Back Yard) – a selfish reaction to change (Dear, 1992;

Lake 1993; Pendall, 1999; Tighe, 2012; Nguyen et al., 2013; Scally and Tighe, 2015; Davison et al., 2016). This opposition to urban densification has been attributed to reasons such as perceived threats to property values, personal security, and neighbourhood amenities (Dear 1990, 1992) as well as the disappearance of valued open space (Pendall, 1999). Further concerns that have been noted include an expected increase in noise, loss of trees, visual bulk intrusion into existing streetscapes, loss of views, overshadowing, loss of character, traffic congestion, parking problems and cynicism towards developers, and undesirable residents (Smith, 1997, Ainsworth, 2005; Dovey and Woodcock, 2010; Davison et al., 2013; Davison et al., 2016).

While there is a spectrum of reasons that underpin local community opposition to urban densification, the more complex task has been to identify the deeper issues that cause such concerns. Deeper understanding of the motivations and perceptions of residents about the impact of a development may be the first step towards generating effective and genuine community engagement (Schively, 2007). This might assist planners to develop strategies that address the underlying issues that drive NIMBY concerns and in turn contribute to the success of the planning decision making process (Schively, 2007) by creating ongoing and productive dialogue.

In order to address NIMBY responses effectively and to engage in a productive dialogue with the community, it is considered important for planners to appreciate the nature and socio-psychological basis of the opposition being expressed. This study intends to analyse this socio-psychological context of NIMBY and community opposition by studying a three case studies in the Perth metropolitan region in Australia.

Significance[1] of the study:

Figure 1.1 depicts the study position in the urban planning discipline. When planning for a place, in this case through the introduction of TODs, community opposition to the proposed urban densification typically becomes a major impediment to efficient and effective decision-making. This study aims to identify the underlying issues causing community opposition and to analyse the implications for engaging a more collaborative planning process. It uses an environmental psychology approach to investigate the dimensions of what constitutes 'desirable density' in order to highlight the socio-psychological reasons behind community concerns.

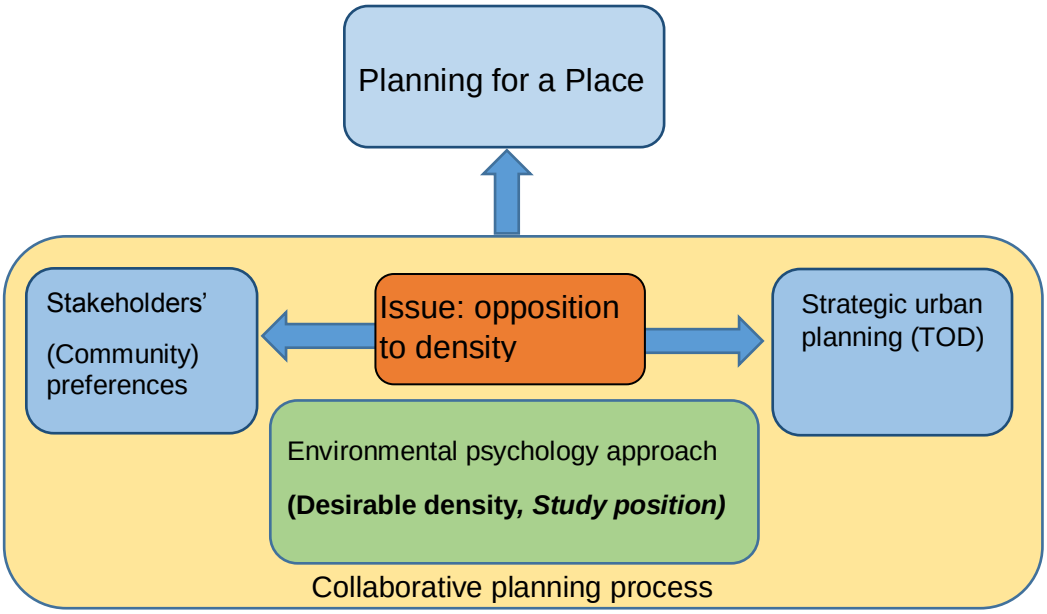


Figure 1.1: Study position in urban planning discipline

[1] Research publications and presentations of the study:

- Accepted abstract for presentation at **PIA WA State Conference**, 31st of **August 2018**: *Infill developments and Community engagement: Thinking beyond NIMBY*
- *COMMUNITY ENGAGEMENT, A multifaceted process*, **book chapter** in PERTH'S INFILL HOUSING FUTURE, Delivering innovative and sustainable housing, publisher: BANKWEST CURTIN ECONOMICS CENTRE, Edited by Steven Rowley, Rachel Ong and Amity James, **October 2017**.
- *Neighbour day: Celebrating co-existence on our streets*, **PIA WA newsletter**, **23rd Feb 2017**.
- *'Affordability', 'Character' and 'Diversity', are we generating grounds for community opposition in planning policies?* **PIA WA newsletter**, 25th Nov 2016.
- '*Desired Density': Community view towards future dense living*; The Australia and New Zealand Association of Planning Schools **(ANZAPS) Conference**, 2016, Western Sydney University
- '*Community Development: the Key for lessening resistance to neighbourhood densification'* **Community Development Network of WA conference (Activ8 WA)**, 8th of September 2016 at Rendezvous hotel, Scarborough, Perth.
- *'Medium density housing, community compromise for living in a Transit Oriented Development area*', **PIA WA newsletter**, 23rd Oct 2015.
- "*Desirable Density: Residents' perception of high density environment in TOD areas*", **Indian Ocean Futures Conference**, Perth (WA), 25-28 March 2014.
- "*Desirable Dense Neighbourhoods: An Environmental Psychological Approach for Understanding Community Resistance to Densification* ", **Urban Policy and Research Journal** 22 Sep 2015.

It will argued that an in-depth study of people's perception and preferences may assist professionals in creating expedient, consensus–based decision processes could reduce community frustration and animosity towards changes proposed for their neighbourhoods (Slovic et. al, 1982). Consequently, the initial contribution of this study is to step back from prominent community opposition studies which are mainly linked to subsidized dwellings, group homes, affordable housing, and social housing shelters for the homeless (Pendall, 1999; Davison et al., 2016) or new built gentrification projects (Davidson & Lees, 2009; Davison & Rowden, 2012) and rather explore the *broader picture* of community concerns to urban densification.

Urban densification in any form changes the physical and social fabric of an area or neighbourhood (Dovey and Woodcock, 2010, Davison, 2013). Studying a neighbourhood as a built environment and a place, demands the investigation go beyond its physical qualities and aspects and focuses on users and a community's psychological needs such as preferences, attitudes, feelings and the lived experience of its residents (Seddon, 1972; Dovey, 1985; Korosec-Serfaty, 1985; Norberg-Shulz, 1971; Relph, 1976; Seamon, 1979, 1982, 2012; Tuan, 1974, 1977, 1980, Lefevbre, 1991; Soja,1996; Hauge, 2007; Lee et al, 2016).

Seamon (2012) argues that the concept of 'place' is a people-place triad (Figure 3.5) which includes the physical qualities of a place, people's actions and activities within it,. Similarly, Lefebvre (1991) and Soja (1996) state that space is a combination of perceived space (physical qualities), conceived space (functions and activities) and lived space (everyday experience of users, a symbolic expression)[2]. Similar to Lefebvre's concept of *lived space*, Proshansky (1978, 1983), an environmental psychologist, discusses the nature of place and place identity as reflecting the social beliefs, attitudes, feelings, values, and preferences of people and the social meanings 'place' generates.

[2] The concept of place will be discussed in detail in chapter three.

In addition, the concept of density and the way it is used in urban policies and the way it is perceived by the community will be investigated in this study. This will be analysed through the lens of the concept of 'desirable density' based on Rapoport's (1975) definition of affective density (Figure 2.10). This idea revolves around the congruence between a physical setting and its socio-cultural norms. Combining the concepts of a desirable place with a desirable density, will be a central contribution of the study.

Research questions

The research will address the reasons behind community concerns with, and opposition to, denser development by posing the following question:

- why does a community oppose high density developments/increasing density in a neighbourhood?

The term 'density' refers to both a quantitative number (number of people or number of dwellings in a given area) and also to the psychological impact of an environment on its users caused by aspects such as crowding and isolation (Rapoport, 1975; Alexander, 1993; Churchman, 1999, Cheng, 2009, Payami Azad, 2018).

Therefore, the perception of the density, or *perceived density*[3]*,* of a built environment encompasses both an individual's estimate of the number of people present in an area, coupled with the built environment's physical and social lived qualities (Rapoport 1975, Bergdoll and Williams 1990, Alexander 1993, Churchman, 1999, Argent, 2008, Ng, 2009 cited in Payami Azad, 2018). The physical quality of a built environment is considered to be an objective measure of an area's landscape, the types and height of its buildings, the openness of its spaces, and its aesthetics etc (Rapoport 1975, Bergdoll and Williams 1990, Alexander 1993, Churchman, 1999, Argent,

[3] Rapoport, (1975) is one of the main founders of perceived density and was main reference of many studies since 1975 till now.

2008, Cheng, 2009). Correspondingly, the social quality of a built environment is considered to be a subjective assessment based on the psychological, cultural characteristics and lived experiences of its users (Rapoport, 1975; Tuan, 1977; Alexander, 1993; Saglie, 1998; Churchman, 1999; Forsyth, 2003; Argent, 2008).

Perceived density is seen to be bookended by the two extremes of density: crowding, which is a form of sensory overload, and isolation, a form of sensory deprivation (Stokols, 1972, Rapoport, 1975, Lozano, 1990, Churchman, 1999, Cheng, 2009). The middle ground between the extremes of crowding and isolation, has been referred to as 'optimum density' by Rapoport (1975) (see Figure 2.10); however, this study describes the middle ground as *desirable density*. It will investigate the preferred physical and social qualities and aspects of a built environment in which an individual feels psychologically comfortable (Rapoport 1975).

Based on this perspective, a further research question was posed:

- What are the physical and social qualities of a *desirable dense built environment* from a community perspective?
- What are the socio-psychological implications of preferred and undesired features of a proposed dense development?

Methodology

This study explores the socio-psychological reasons behind community resistance towards urban density, adopting an environmental psychology approach to studying what various communities consider to be a desirable *density* in the context of their existing *neighbourhood.* An environmental psychology approach explores community views by studying their perceptions, preferences and socio--psychological needs in relation to the places they inhabit, such as their individual homes and the wider neighbourhood. The approach helps to investigate community attitudes towards urban density as well as considerations about what constitutes a *desirable dense* neighbourhood.

The case studies used are *neighbourhoods* located within the catchment areas of Transit Oriented Developments currently being planned to accommodate higher density developments (Rowley and Phibbs, 2012; Hedgcock and Brunner, 2015). A methodological framework, conceptualising what constitutes a *desirable dense neighbourhood* has been developed (Figure 4.2). It comprises physical qualities and aspects such as preferred house or dwelling types, and preferred housing characteristics, but it also incorporates social qualities and aspects which include preferred neighbourhood social characteristics.

Three case studies were chosen, as it was assumed that the features that constitute a *desirable dense* neighbourhood would differ between AC/TODs, based on their location and population demographics. The main characteristics that drove the selection of the case study areas were their location – in terms of their distance from Perth's CBD, their socio-economic structure and Activity Centre/TOD density targets.

Canning Bridge, Cannington and Wellard are the three TODs selected as case studies. Canning Bridge TOD area encompasses parts of established and affluent suburbs including Applecross, Mount Pleasant, Como, Manning and Salter Point which are all within 7km of Perth CBD. Cannington TOD area includes some parts of old middle class suburbs of East Cannington, Cannington and Queens Park which are within 12km of CBD. Wellard is a newly-designed (2007), TOD area located 35 km south of Perth CBD with its residents being categorised into middle to low income brackets. The data collection method will encompass both quantitative and qualitative approaches. The first stage was conducted by sending out a quantitative questionnaire to current residents living within catchment area of train stations. The second stage was developed based on the findings of the first stage and used qualitative semi-structured interviews.

Thesis structure

Chapter Two explores the literature surrounding the concept of density. The idea of 'desirable density' is defined and discussed in order to identify its potential contribution to the research objectives.

Chapter Three reviews the concept of 'place' and discusses what constitutes a *desirable place*. This is followed by a review of the literature regarding the meanings of home and of neighbourhood as *place*s, and the concept of 'place' in relation to housing and neighbourhood are discussed. Community resistance is discussed in order to define the position of this study within the urban planning discipline. Further, an environmental psychological approach is introduced as a useful means to investigate the socio-psychological reasons for community opposition toward urban densification. This approach also enables the connection of community perceptions of desirability to sustainable urban planning objectives of density.

Chapter Four outlines the core research framework around identifying what constitutes a *desirable dense* neighbourhood. The framework encapsulates the methods of data collection used in the study, research design, case study selection rationale, data analysis strategy, data collection methods, and data analysis techniques.

Chapter Five discusses the principles and policies of Transit Oriented Developments and how they have been developed and applied in Perth. The focus of the chapter is on the housing density objectives implicit in TODs.

Chapter Six discusses the outcomes of the case study questionnaire carried out in Canning Bridge, an affluent, inner-ring area. Chapter Seven discusses Cannington, a middle-ring, middle-class TOD and Chapter Eight concerns Wellard, an outer-ring, middle-class TOD. Chapter Nine compares and discusses the case studies findings in order to identify common physical and social features of *desirable dense* neighbourhoods. Furthermore, the chapter highlights the socio-psychological features that negatively affect the

perception of a dense neighbourhood. Chapter Ten focuses on analysing the socio-psychological features that are identified in Chapter Nine. Finally, Chapter Eleven concludes the findings.

Thesis scope

This study focuses on the community's socio-psychological perception of density, *desirable density* and the socio-psychological reasons that cause opposition to proposed density increases. Other issues related to the implementation of higher-density housing policy goals such as property rights, social housing, affordability and gentrification are beyond the scope of the deliberations presented in the thesis. While the research does not intend to generalise the results to the wider Perth region, some statistical calculations are presented for each graph in Chapter Nine (comparison of case studies) to substantiate the results identified at the case study levels.

CHAPTER 2

Desirable Density

Introduction:

This chapter reviews the concept of density in the literature, discussing the ways in which it has been used in urban planning and the ways it is perceived psychologically by individuals. Further, the concept of 'desirable density' is defined and discussed in order to identify physical and social contributing factors and features. Finally, a *desirable dense* neighbourhood framework is developed to identify the features that shape community perception of a *desirable dense* environment.

A. Density in urban planning

Density per se is a conceptual tool used to achieve broad objectives such as sustainability and liveability in cities (Moroni, 2016). It is a multi-faceted and complex concept (Churchman, 1999, Cheng, 2009) and a keyword in the history of the city, reflecting the way urban areas have been conceived and understood (McFarlane, 2015). This familiar concept is seen as an objective, quantitative descriptor by planners and other professionals in urban-related disciplines, while in practice it is a more complex phenomenon (Churchman, 2002). It is the main element in the social process of making cities (Tonkiss, 2013; McFarlane, 2015). This highlights the fact that density needs to be understood spatially, politically and socially (McFarlane, 2015).

While there is no *universal* definition for density, (Galle & Gove, 1978; Churchman, 1999) different countries and urban disciplines use various definitions and approaches to study the concept. Psychologists and sociologists (Rapoport, 1975; Proshanksy and O'Hanlon, 1977; Stokols and Altman, 1987, Lozano, 1990) study possible negative psychological effects of density, while economists, transport experts and environmentalists talk about the benefits of density (Preiser, 1992; Alexander,1993, Hitchcock, 1994, Churchman, 1999; Curtis, 2009; Cervero, 2009; Newman, 2009).

McFarlane (2015) takes a topological approach to the study of density, where the focus is less on density as a ratio (a quantitative aspect) and more on the way density is produced, experienced, perceived, negotiated, and contested in the spaces of a city. McFarlane (2015) uses this approach to discuss issues related to slum housing, suburban developments and emerging ideas such as New Urbanism. Accordingly, the traditional aversion to density in historical planning intervention and recent uncritical acceptance of density (in New Urbanism and Transit Oriented Developments) may both generate problems if increasing density does not result in bringing together people of all kinds, from all walks of life in our cities (Moroni, 2016).

The concept of density in urban-related disciplines reflects a multi-dimensional variable involving physical, social and cultural qualities, features and aspects (Galle and Grove, 1978, p.104; Fonseca and Wong, 2000; Argent et al., 2005, Argent, 2008, Cheng, 2009). It encompasses the physical and social characteristics of an environment (Rapoport, 1975, p.150) that may change over time (Galle & Gove, 1978, p.105). For instance, the interaction between physical qualities, features and aspects and their variables such as building types, noise, heat and pollution and social qualities, features and aspects, and the variables of these such as the socio-economic status of a neighbourhood complicates the issues related to density in urban planning (Churchman, 1999).

Usually studies investigating community opposition or NIMBY objections towards density are about social housing, public housing and affordable housing developments (Dear, 1992; Inhaber, 1998; Pendall, 1999; Burningham, 2000; Schively, 2007; Davison et al., 2013; Scally & Tighe, 2015; Davison et al., 2016; Sebastien, 2016) or new build gentrification projects (Davidson & Lees, 2009; Davison & Rowden, 2012). Lees (2008) points out gentrification policies and the built projects failed to address social objectives such as creating less segregated, diverse and sustainable communities.
Therefore, this study will investigate the broader picture of opposition to densification by studying the socio-psychological relationship between people and the built environment in order to reveal the broader reasons behind community opposition.

There are two approaches taken to investigate the effect of density on people's lives: measured density (quantitative) and perceived density (qualitative), which has at its extremes, feelings of either crowding or isolation (Rapoport, 1975; Alexander, 1993; Churchman, 1999; Cheng, 2009). The approach taken in this research is a combination of measured and perceived density with a clear focus on the qualitative, socio-psychological aspect,

similar to McFarlane's (2015) topological approach that considers the way density is perceived by the community.

A.1 Measured density (physical aspect):

Measured density involves the idea of a quantitative ratio. Churchman (1999), Forsyth (2003) and Argent (2008) call it *measured density*, Galle and Gove (1978, p.104) call it *structural density*, 'the way in which an area is built up', and Cheng (2009, p.4) calls it *physical density* 'a numerical measure of the concentration of individuals or physical structures within a given geographical unit'. There are differing definitions of density based on the different numerators and denominators used (Churchman, 1999; Forsyth, 2003, Cheng, 2009). The common definition refers to the number of units (numerator) in a given area (denominator) (Rapoport, 1975; Forsyth, 2003) and this numeric evaluation is used differently in different countries.

Cheng (2009, pp.3 and 4) divides physical density into two categories: people density and building density. People density is the number of people or households per given area, while building density is defined as the number of building structures to an area unit (Figure 2.1). The study focuses on residential building density. In local planning schemes residential/housing density (the number of dwelling units per given area) (Churchman, 1999) are widely used which does not differentiate between small or large homes.

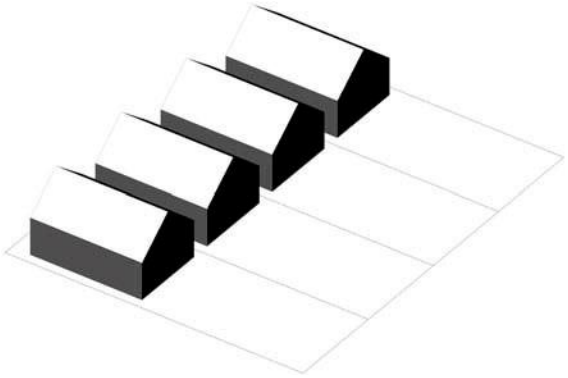


Figure 2.1: Building density (Source: Vicky Cheng, 2009, p.3)

Figure 2.2: Residential density: Number of dwellings to an area unit (Source: Residential density guide, Landcom, 2011, p.10)

There are two ways to measure residential density (Figure 2.3): gross density and net density. Residential gross density is the living space of the population within a residential area, including both private and public space (Hitchcock, 1994 cited in Churchman, 1999; Cheng, 2009) (Figure 2.4).
Residential net density consists of the number of dwelling units built on residential land parcels, which excludes roads, parks, and other public lands (Alterman and Churchman 1999; Berridge Lewinberg Greenberg, Ltd. 1991b; Wentling 1991; Landcom, 2011) (Figure 2.5).

Figure 2.3: Gross and Net residential density (Residential density guide, Landcom, 2011, p.9)

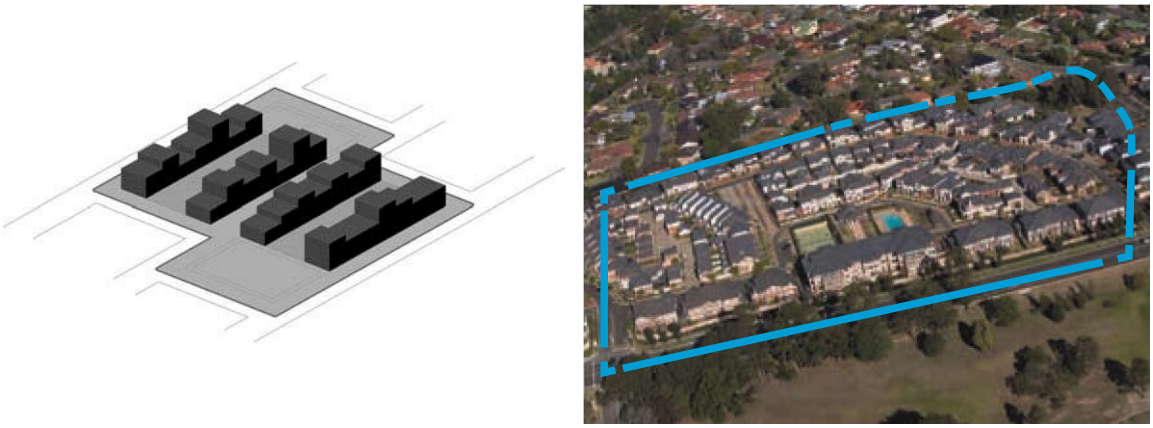


Figure 2.4: Gross density (left image, source: Chen, 2009, p.4; Right image, source: Landcom, 2011, p.10)

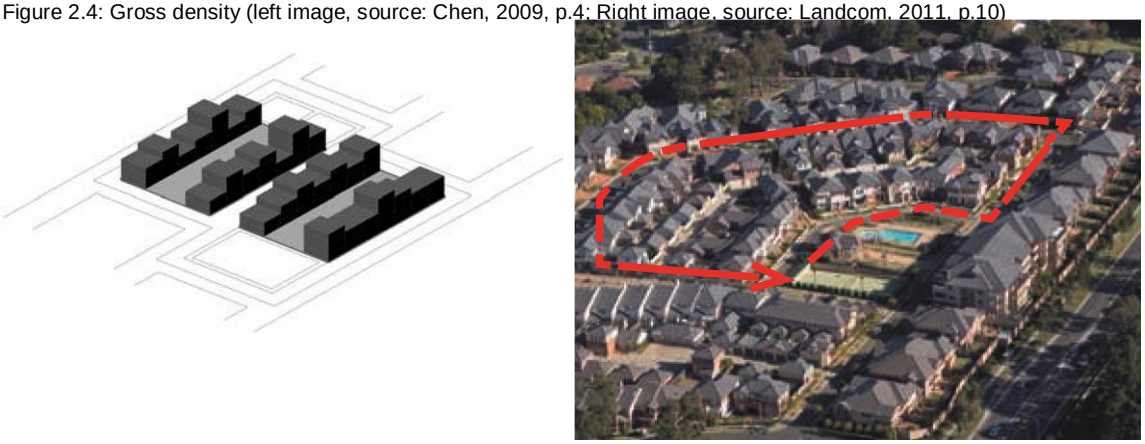


Figure 2.5: Net density (left image, source: Chen, 2009, p.4; Right image, source: Landcom, 2011, p.10)

Additional measures such as Floor Area Ratio, Building Site Coverage, Building Height and Setbacks and these have been adopted in land-use zoning and development control in form of design guideline documents for builders and architects for the intensity of residential net density (built form) (Figure 2.6 and 2.7) (Alexander, 1993; Forsyth, 2003, Cheng, 2009).

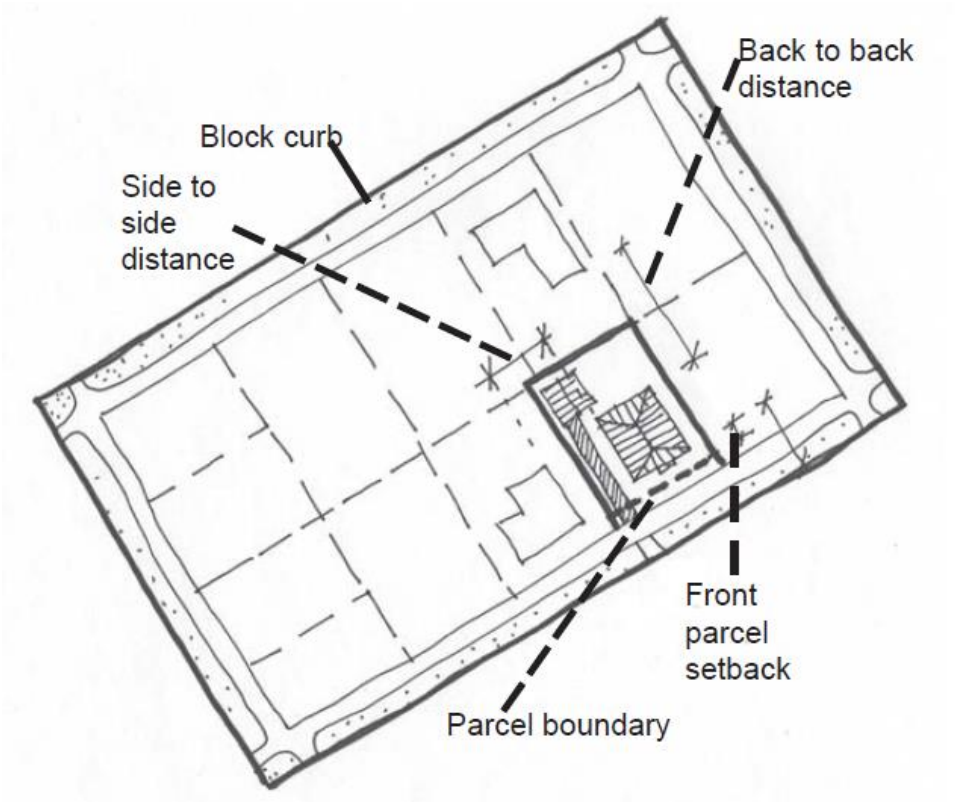
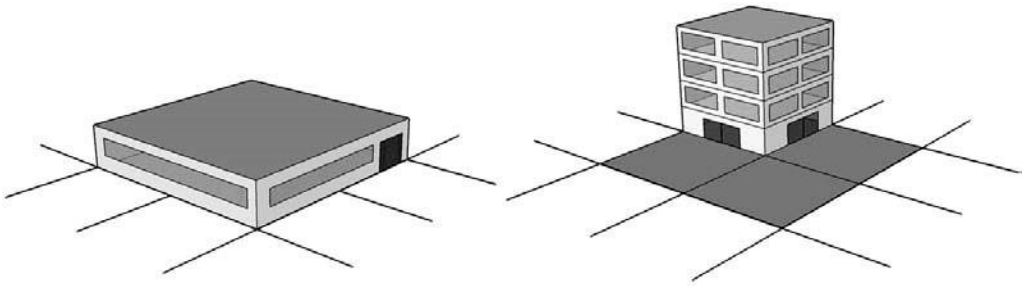


Figure 2.6 Density and building intensity factors (source: Anne Forsyth 2003 p.6)



Plot ratio = 1, Site coverage = 100 per cent

Plot ratio = 1, Site coverage = 25 per cent

Figure 2.7: Two built forms with the same plot ratio but different proportions of site coverage (Source: Cheng, 2009, p.9)

Measuring physical density tells us little about the broad range of densities and the potential mix of dwelling types (Alexander, 1993). Different built forms, such as multistorey towers (high rise), medium-rise buildings (medium rise) and single-storey houses (low rise) as Figure 2.8 shows, can address the same density target (Ellis, 2004; Campoli and MacLean, 2007; Cheng, 2009). Thus, developments of the same density can be achieved with a variety of building forms. In Alexander's (1993) study, the relationship between density and urban form is explored extensively based on changing variables, including unit size, lot size and block configuration. He concludes that row housing and low-rise garden apartments can achieve mid-range residential densities, to a maximum R145 (145 dwelling per hectare) and R111, respectively (Alexander, 1993, p. 196).

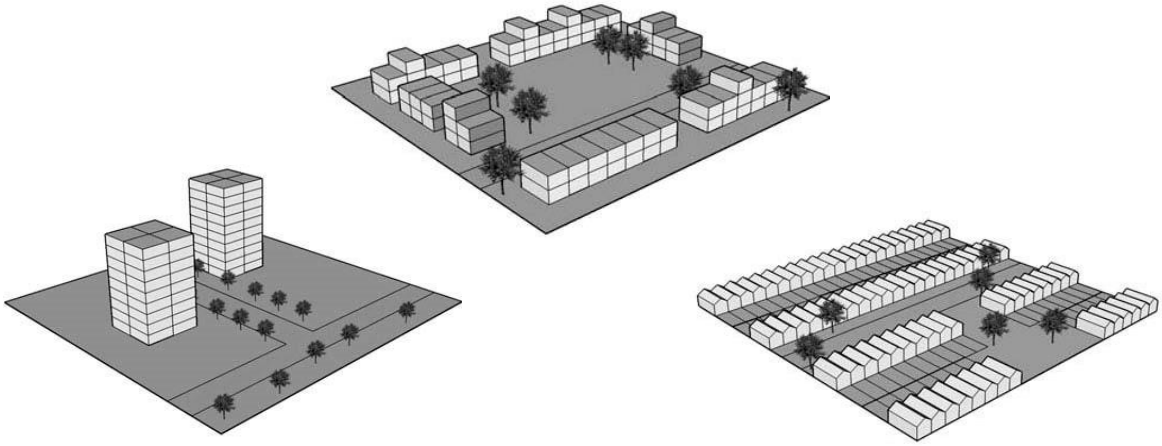


Figure 2.8: Same density with different built forms from left to right: multistorey towers (high rise); medium-rise buildings (medium rise); single-storey houses (low rise) (source: Cheng, 2009, p.10)

While *measured density* relates to the physical form of a building and can be measured and controlled by numbers, there is another aspect of density that is not as easy to measure and control. It is the socio-psychological perception of a built form, which is not limited to the building's physical qualities, features or aspects. It extends to the interactions between a person and the building, and between a person and other people in the same area (Cheng, 2009). Individual cognition (perception) and socio-cultural norms are factors that contribute to the interactions between people (Rapoport, 1975;

Alexander, 1993, Churchman, 1999, Cheng, 2009). This aspect of density is called '*perceived density*'.

A.2 Perceived density (socio-psychological aspect):

Perceived density is an individual's estimate of the number of people present in a given area. It depends on individual cognition (perception), his or her socio-cultural background and the physical space he or she is in; see Figure 2.9 (Rapoport, 1975, Alexander, 1993).

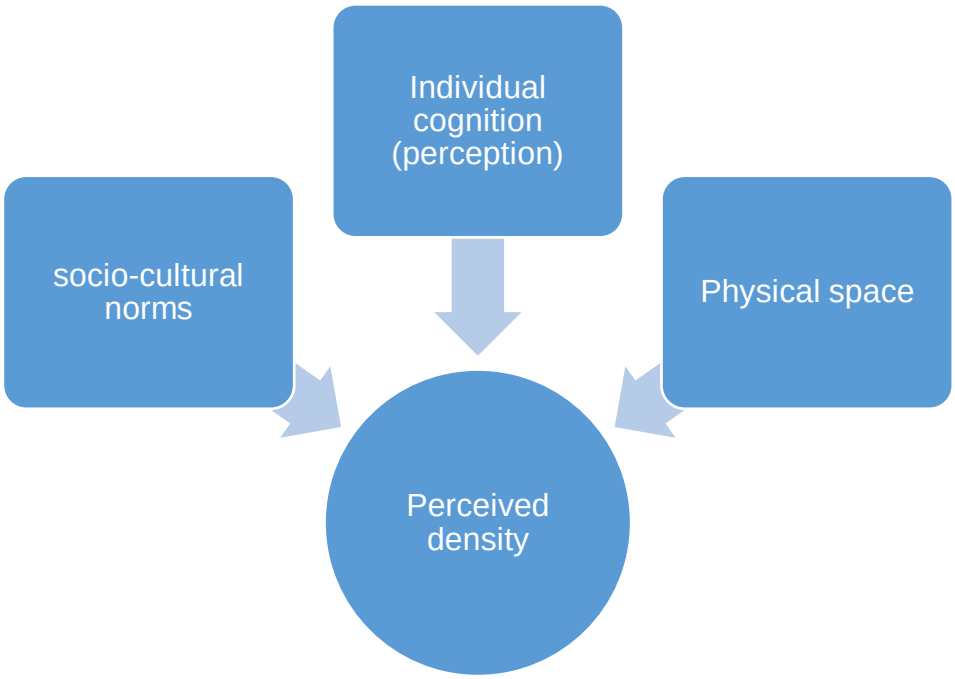


Figure 2.9: Factors contributing to an individual's *perceived density* (prepared by the author)

It is a psychological aspect of density and depends on cues in the built environment. The cues are associated with people's activities, their interactions, the space available to them, and the organisation of that space (Rapoport, 1975; Churchman, 1999).

Spatial characteristics and their organisation such as building height, space openness, spacing between buildings and building coverage are physical features of a space affecting perceived density (Rapoport, 1975; Zacharias and Stamps, 2004 cited in Cheng, 2009). Furthermore, the qualities of

interactions between people in a space are rooted in personal characteristics and socio-cultural norms, and these aspects affect an individual's perceived density (Rapoport, 1975, Chan, 1999 cited in Cheng, 2009). For instance, two similar spaces with the same number of people, may affect the perceived density of an individual differently as a result of varying levels of homogeneity or the different behaviour of people in those spaces (Rapoport, 1975, Chan, 1999 cited in Cheng, 2009).

> For example, suppose there are two spaces with the same occupancy rate of 3 square metres per person; in one case, there is a group of friends in a clubroom, while in another there are several unacquainted people in a small lobby. Clearly, these two situations are very different in social and perceptual terms, even though they show the same physical density (Chan, 1999 cited in Cheng, 2009, p.12)

Perceived density has a spectrum between two extreme psychological feelings of 'crowding' and 'isolation'. *Crowding* is defined as a negatively perceived density, a state of psychological stress where density is considered too high (Churchman, 1999, p. 390). *Isolation* is also considered an unfavourable condition (Rapoport, 1975), also known as 'undercrowding' (Lozano, 1990) In this situation there is an excessive abundance of space in which the individual feels isolated and needs some sense of enclosure and contact with others. Therefore, perceived density (with crowding and isolation at its extremes) is subjective and depends on how different people under different circumstances, in different cultures and countries, perceive and evaluate the 'measured density' of a space (Rapoport, 1975; Tuan, 1977; Alexander, 1993; Saglie, 1998; Churchman, 1999; Forsyth, 2003; Argent, 2008, Cheng, 2009).

Perceived density emphasises that the impact of density is far more complex than a simple number (Rapoport, 1975, Forsyth, 2003). The way 'measured density' is perceived is rooted in the cultural characteristics of a society (Rapoport, 1975, Churchman, 1999). People living in different areas of the same measured densities may have quite different perceptions of densities

due to different cultural standards, norms and desired levels of social interaction (Rapoport, 1975, Churchman, 1999). Therefore, 'cultural context' plays an important role in the perception of 'appropriate density' (Desor, 1972 cited in Rapoport, 1975).

A.3 Crowding

Rapoport (1975) views crowding as one extreme of 'perceived density', *crowding* and measured (physical) *density* are related to each other and are distinguishable. Crowding may be a negative subjective experience of a certain density level, reflecting notions of overload and excessive interaction (Rapoport, 1975, p.134). Stokols (1972a, 1978) also mentions physical density as a condition of limited space while crowding is a subjective experience of psychological stress. It is a psychological state of discomfort and stress related to spatial aspects of the environment (Sears et al., 1988 cited in Kaya and Erkip, 1999, p.183).

Lozano (1990) discusses *crowding* as the ratio of people to dwelling units or rooms. For instance, a high-rise upper-class apartment building can feel uncrowded as there are few persons per dwelling, while conversely high crowding levels can be experienced in rural shacks where there are many people per room (Lozano, 1990). While Lozano (1990) quantifies the crowding level, he indicates it is a phenomenon encompassing physical and social characteristics of an environment. It is a 'perceived' condition of limited space; a phenomenon that encompasses spatial, social and personal factors (Lozano, 1990). It is a psychological phenomenon; a perception created between the interplay of cognitive, social and environmental factors (Cox et al., 2006, p.248). It is about relationships between people, and their physical and social environment (Rapoport, 1975).

Furthermore, Stokols et al. (1978) indicate that a feeling of being crowded is caused by the combination of non-spatial factors such as 'stimulus overload' (such as high noise levels or high light levels) and behavioural constraints

(such as limitations on privacy caused by the proximity to others). It is often perceived as a lack of control over the immediate environment which increases the desire to put more space between oneself and others as a means of avoiding actual or anticipated interference (Stokols et. al., 1978, p.236, Papastefanou et al., 2018). It is an uncomfortable, stressful and tense situation experienced by an individual (Papastefanou et al., 2018).

Stokols et al. (1978) identify two contributing factors in the crowding experience. One is the *nature of discomfort*, whether is intentional or unintentional, and the other is the type of *environment*, including primary environments such as home and work place, and secondary environments such as public transport or shopping centres (Stokols et. al., 1978). For example, the first factor, the nature of discomfort, may be 'neutral', in that it is unintentionally caused by an annoyance from the environment which results in a need for more space to move around in (Stokols et. al., 1978), like finding a waiting spot in a busy train station. But sometimes the nature of discomfort may be caused by intentional interferences to a person by other persons, such as the presence of hostile or unpredictable people (Stokols et. al., 1978, p.236) exhibiting anti-social behaviours.

The other contributing factor in the crowding experience is the *type of environment* within which it occurs. Primary-secondary environments such as residential and work environments are settings within which an individual spends significant amounts of time with others within the boundaries of respected personal spaces. Secondary environments such as transportation and commercial environments are where encounters between individuals are relatively transitory, impersonal and insignificant (Stokols et. al., 1978). Consequently, an intentional crowding experience may be more challenging to resolve than a neutral, or unintentional crowding experience if it occurs in primary environments such as homes and neighbourhoods, than if it occurs in secondary environments such as public transport (Stokols et. al., 1978).

Perceived crowding within the residential environment, for instance in a neighbourhood or an apartment complex, is more likely to be associated with social characteristics and features than other secondary environments such as classrooms or shopping centres (Stokols et. al.,1978, p.250). Further in Bonnes et al.'s (1991) study of a neighbourhood in Rome, perceived crowding is strongly related to the socio-cultural characteristics of a neighbourhood. Elsewhere, Milgram (1970 cited in Little, 1987, p.222) also highlights social heterogeneity as an important social variable in the experience of crowding in cities.

A feeling of being crowded can originate from the physical characteristics of a space such as its size and lay-out, as much as it can from the space's social characteristics such as being in the midst of strangers (Stokol, 1972; Lozano, 1990). As a result, in order to reduce their perception and feeling of being crowded, people may reduce the quality and quantity of their interaction with others by setting up their own hierarchies of preference as to who they are keen to interact with (Milgram, 1970 cited in Little, 1987). For instance, Rapoport (1975) argues that the presence of *unlike* people has a similar effect to traffic and noise on an individual's experience of crowding. For example, a place with a homogeneous population, having similar values, behaviour patterns and so forth can lead to a perception of 'low density' compared to a place with a heterogeneous population. Tuan (1977) also stresses that a feeling of crowding is more likely to be produced by social, economic and cultural factors than by physical factors of housing spaces.

The significance of the social characteristics of a physical environment has led the analysis of crowding to a discussion about the influence of 'culture'. Tuan (1977), Lozano (1990) and Saglie (1998) stress the importance of 'culture' as a central control over human behaviour, and one of the most critical factors affecting the perception of both crowding and density. Hall (1966, p.129) also refers to 'culture' as a significant variable in constituting proxemic patterns[4] for people of different cultures. Stress level increases

[4] Hall (1966) categorised distances among people into four groups:

when people are cramped by the space, and consequently sensitivity to crowding rises according to their cultural norms and standards (Hall, 1966). Lozano (1990) also states that cultural norms and standards contribute to people's perceptions of their environment and affect the way they interact.

> People are social beings. We appreciate the company of our own kind. How physically close we tolerate or enjoy the presence of others, for how long, and under what conditions vary noticeably from culture to culture (Tuan, 1977, p.62).

Understanding the feeling of being crowded, therefore, cannot be limited to the number of people per room or unit and the physical quality of the built environment rather it has to include an assessment of social quality of users' interactions and their experiences in the built environment, which also arise from their cultural norms.

A.4 Isolation

Crowding is one extreme of 'perceived density', isolation is the other; for Galle and Gove (1978, p.110), living alone is the measure of this extreme. Rapoport (1975, p.145) states that 'isolation' can be seen as an absence of wanted interaction, and this particular lack is considered a threat to an individuals' mental health, caused as it is by a lack of social control over behaviour, and of social support and feedback that together may lead to a failing grip on reality.[5] Rapoport (1975, p.152) views 'isolation' as a condition of inadequate social stimulus. Similarly, Lozano (1990, p.320) refers to 'undercrowding', the opposite of 'crowding', as 'an excessive abundance of space in which an individual suffers social isolation and needs enclosure and contact with others'. Lozano (1990, p.321) also asserts that 'too much space can be as undesirable as too little'. In this sense isolation is just as much an

a) The Intimate: (skin contact to about 18 inches)- love comfort and tenderness
b) The Personal- (18 inches to 4 ft.) arm's length away, reserved for friends rather than lovers
c) The Social- (4ft-12ft.) impersonal business and casual relationships
d) The public- (12-25ft.) formal and rather detached

[5] Galle and Gove (1978) also mention the link between isolation and alcoholism and suicide rates.

undesirable feeling as the feeling of being crowded. The question then arises as to whether there is any middle ground between the two extremes.

B. Desirable density

In discussing 'perceived density', Rapoport (1975) views 'optimum density' or appropriate density, as the middle ground between the extremes of crowding (as a form of sensory overload) and isolation (as a form of sensory deprivation). Crowding is due to 'an inability to escape interaction' and 'isolation' is due to 'an inability to find people with whom to interact'. Both extremes are evaluated through desired levels and cultural norms (Rapoport, 1975, p.141)[6].

Thus, *preferred density* (appropriate density or optimum density) is considered the acceptable mid-range for any given group and context. Rapoport's 'affective density' diagram refers to this middle ground as 'O.K.'— (Figure 2.10).

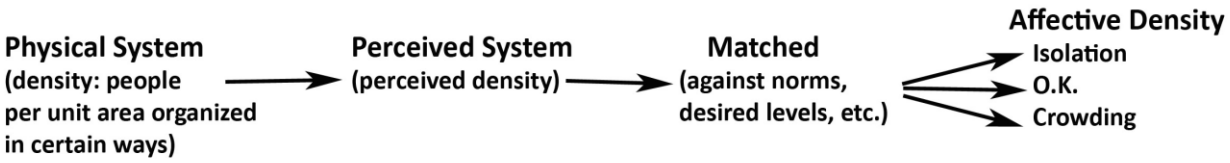


Figure 2.10: Affective density diagram. Source: Reproduced by the author from Rapoport (1975, p. 137).

Rapoport (1975) further indicates physical and social characteristics that influence the evaluation of 'perceived density' as follows:

> (a) *Physical characteristics*, which refer to sensory inputs from the physical environment such as lights, sounds, noises, smells,

[6] Rapoport (1975) argues that perceived density as a subjective concept is not limited to physical characteristics of a space. For instance, in explaining 'Crowding' and 'Isolation' concepts (two ends of perceived density spectrum) through 'privacy', he views 'privacy' as the way of controlling and keeping social interaction at optimum level rather than limit his views to physical barriers creating privacy.

movements, activities, building heights and spaces between buildings. This depends on the built environment's physical characteristics.

(b) *Social characteristics*, which refer to the degree of social interactions one can experience in an environment. This depends on an individual's socio-cultural characteristics such as rules of behaviour, social factors such as population homogeneity, kinship, age, sex, ritual, activity cycles and many other cultural factors that may affect perception of density.

The way density is judged, read, decoded and perceived is based on the physical and social characteristics of a dense environment (Rapoport, 1975). Rapoport (1975) compares different spaces based on their physical characteristics. He compares tight spaces (dense spaces) versus open spaces (not dense spaces), tall buildings (dense) versus low buildings (not dense). Furthermore, he relates social characteristics such as fast rhythms of activities to dense environments and slow rhythms to less dense spaces. He relates high levels of social interaction to dense environment and low levels of social interaction to low density areas. It is interesting that he associates social heterogeneity to dense areas and social homogeneity to low density areas.

For instance, the same space with the same number of people is perceived and evaluated very differently in terms of its density feeling (affective density) depending on whether the people are kin or non-kin (Mitchell, 1971, Anderson, 1972 cited in Rapoport, 1975, p.150). The presence of 'others' and 'strangers' is the social characteristic of an environment that may cause higher perceived density (crowding feeling) as Rapoport (1975) mentions.

Therefore, density can be seen as a complex 'perceived experience' and should be viewed as much more than the number of people per unit area or similar ratios (such as Residential codes, dwelling numbers per hectare) (Rapoport, 1975). Ratio models cannot predict behavioural and subjective

consequences and experience of density (Rapoport, 1975; McFarlane, 2015). Unlike ‘measured density’, perceived density is ‘socially produced’. It becomes the framework for lifestyle responses and cultural interpretation, and may drive the emotional responses to debates about ‘measured density’ (Saglie, 1998, as cited in Argent, 2008; Tuan, 1977; Jenks & Dempsey, 2005; Argent, 2008, as cited in Dempsey *et al*., 2012).

Thus, ‘desirable density’, or the ‘preferred’ density, implies not only the preferred physical characteristics of a built form but also the preferred social characteristics that may drive the level of social interaction.

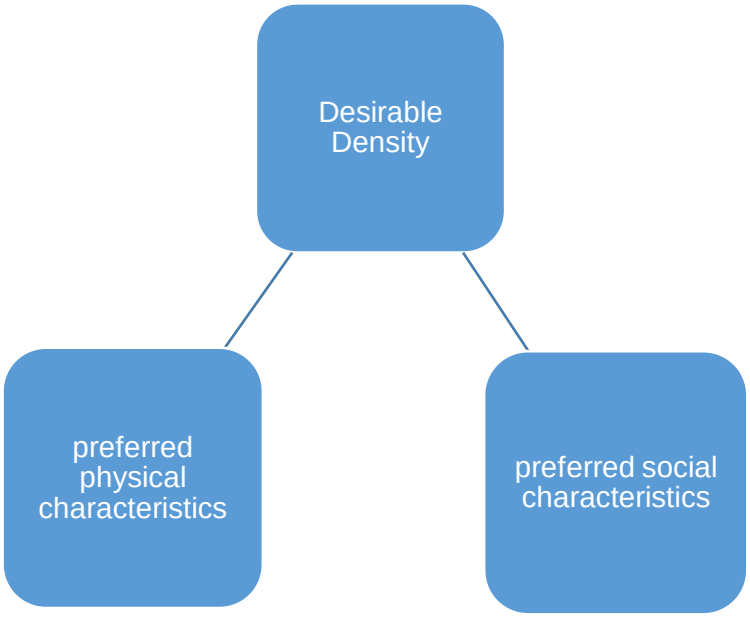


Figure 2.11: Desirable density

B.1 Desirable neighbourhood

‘Great neighbourhoods’ and ‘neighbourhood satisfaction’ are commonly used concepts in the urban planning field and are similar to the idea of a ‘desirable neighbourhood’. Since 2007, the American Planning Association (APA) annually designates 10 places as great neighbourhoods; it has a short list of seven characteristics followed by 14 guidelines (Figure 2.12) (Talen et. al., 2015).

Characteristics of a great neighborhood include:

1. Has a variety of functional attributes that contribute to a resident's day-to-day living (i.e. residential, commercial, or mixed uses).
2. Accommodates multimodal transportation (i.e., pedestrians, bicyclists, drivers).
3. Has design and architectural features that are visually interesting.
4. Encourages human contact and social activities.
5. Promotes community involvement and maintains a secure environment.
6. Promotes sustainability and responds to climatic demands.
7. Has a memorable character.

Guidelines for great neighborhoods:

1.0 Neighborhood form and composition

- 1.1 Does the neighborhood have an easily discernable locale? What are its borders?
- 1.2 How is the neighborhood fitted to its natural setting and the surrounding environs?
- 1.3 What is the proximity between different places in the neighborhood? Are these places within walking or biking distances? Does walking or bicycling within the neighborhood serve multiple purposes? Describe (access to transit, parks, public spaces, shopping, schools, etc.). How pedestrians and bicyclists are accommodated (sidewalks, paths or trails, designated bike lanes, share-the-road signage, etc.)?
- 1.4 How does the neighborhood foster social interaction and promote human contact? How is a sense of community and neighborliness created?
- 1.5 Does the neighborhood promote security from crime, and is it perceived as safe? How are streets made safe for children and other users (e.g., traffic calming, other measures)?
- 1.6 Is there consistency of scale between buildings (i.e., are buildings proportional to one another)?

2.0 Neighborhood character and personality

- 2.1 What makes the neighborhood stand out? What makes it extraordinary or memorable? What elements, features, and details reflect the community's local character and set the neighborhood apart from other neighborhoods?
- 2.2 Does the neighborhood provide interesting visual experiences, vistas, natural features, or other qualities?
- 2.3 How does the architecture of houses and other buildings create visual interest? Are the houses and buildings designed and scaled for pedestrians?
- 2.4 How is local history retained, interpreted, and used to help create a sense of place?
- 2.5 How has the neighborhood adapted to change? Include specific examples.

3.0 Neighborhood environment and sustainable practices

- 3.1 How does the neighborhood respond to the growing threat of climate change (e.g., local tree cover mitigating heat gain)?
- 3.2 How does the neighborhood promote or protect air and water quality, protect groundwater resources if present, and minimize or manage stormwater runoff? Is there any form of "green infrastructure"?
- 3.3 What measures or practices exist to protect or enhance local biodiversity or the local environment?

Figure 2.12: Guidelines of great neighbourhoods (source: Talen et al, 2015, What is a "Great Neighborhood"? An Analysis of APA's Top-Rated Places)

Out of the seven characteristics mentioned in Figure 2.12 for a 'great neighbourhood', three of the criteria refer to social attributes: having a memorable character (item 7), encouraging human contact and social activities (item 4) and promoting community involvement (item 5). The other characteristics in Figure 2.12 highlight the physical attributes of a 'great neighbourhood' such as multimodal transportation (i.e., pedestrians, cyclists, and drivers). Similarly, Buys and Miller (2012) in their Australian study of residential satisfaction in inner urban higher-density Brisbane highlight the physical and social features of neighbourhood and dwellings as the critical factors in predicting residential satisfaction. For instance, features in Buys and Miller's, (2012) study include dwelling design qualities such as the noise level, safety and neighbourhood qualities such as 'walkability' and social contacts (family, friends, familiar faces). There are two factors influencing an individual's neighbourhood satisfaction (Basolo & Strong, 2002 cited in Lee et. al., 2016):

1) Individual household characteristics: socio-demographic factors: age, gender, race, education, marital status, income, and length of residence
2) Neighbourhood quality characteristics: *physical environment* such as access to facilities (objective attributes) and *socio-cultural setting* (subjective or perceived attributes) (Connerly & Marans, 1988 cited in Lee et.al., 2016)

In their study, Lee et. al. (2016) state that people's perception of an environment in regard to such things as pedestrian and traffic safety, low level of fear of crime, and aesthetic elements such as the presence of trees, absence of litter, attractive buildings, and natural sights positively correlate to neighbourhood satisfaction. However, perceptions of high residential density have been found to lead to lower neighbourhood satisfaction (Lee et. al., 2016). It highlights again the critical relation between the perception of density and level of neighbourhood satisfaction. Considering that the perceived density of a neighbourhood environment includes both its physical

and social features, will a *desirable dense* neighbourhood framework assist urban planners and policy makers in understanding the negative correlation between high residential density and individuals' neighbourhood satisfaction?

Summary of the chapter:

In this chapter, the concept of density in urban studies has been reviewed. Two types of density were discussed: measured density (physical aspects) as adopted in urban planning policies, and perceived density (socio-psychological aspects) as experienced by individuals. Further, the concept of desirable density is defined as the middle point on a continuum between two extremes of perceived density: crowding and isolation. Desirable density is a socio-psychological concept that describes the way people relate to their environment and this approach was adopted as a suitable path for the study of community perception in order to develop a framework for later case study analysis. This approach encompasses a multidisciplinary field with an emphasis on people-environment relationships (Sime, 1999) and is able to contribute to urban planning by connecting local social contexts to broader planning objectives (Churchman, 2002). This approach will be discussed in relation to concept of place in the next chapter.

CHAPTER 3

Place,
AND
Planning for a place

Introduction:

This chapter reviews the literature on the concept of place. The main objective of this study is to understand underlying reasons of community opposition to densification in a neighbourhood by investigating features of community's *desirable place*. It is followed by reviewing the literature on the various meanings that an individual attributes to home and neighbourhood as *place*s. Further, the challenge that community resistance raises in planning for a *place* is discussed in order to justify the use of environmental psychology as an appropriate approach for investigating the socio-

psychological implications of community concerns in regard to urban densification.

A. What is a place?

The concept of 'place' has various definitions in the literature, yet evades one concrete definition. When considered as part of the people-environment system, 'place' has a theory spectrum that extends from the 'physical' perspective, which is concerned with the impact of a place's dimensions such as colours, shapes and activities on people's behaviours, to a 'dynamic' perspective, where social, cultural and psychological meanings of a place are discussed philosophically (Franck, 1984; Hauge, 2007). The nature of a 'place' is complex. Heidegger (1962) one of the most influential theorists in the phenomenology of place, states that place is not an absolute concept, rather it is understood through everyday human experience. Canter (1977, p.158), an environmental psychologist, views a place as 'the result of relationships between activities, conceptions, and physical attributes' (Figure 3.1).

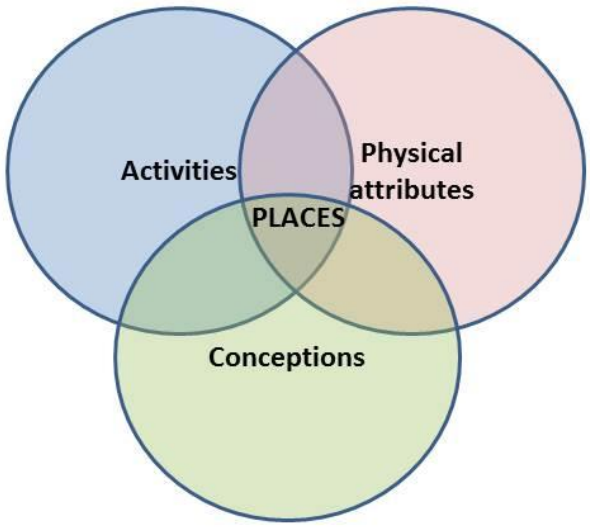


Figure 3.1 Canter's visual metaphor for the nature of places (1977, p.158)

Canter (1977, p.158) argues that *activities* are actions and behaviours that are anticipated in a given *locus*; a setting with 'physical parameters' that people describe, understand and perceive differently. Other scholars such as Stokols and Shumaker (1981) and Speller (2000) have a similar 'transactional' view where individuals and their environment are seen as 'undifferentiated' (Hauge, 2007). Similar to Canter's nature of place as expressed in the diagram, Seamon (2012, p.10) describes the people-place relationship as a 'triad' (Figure 3.2).

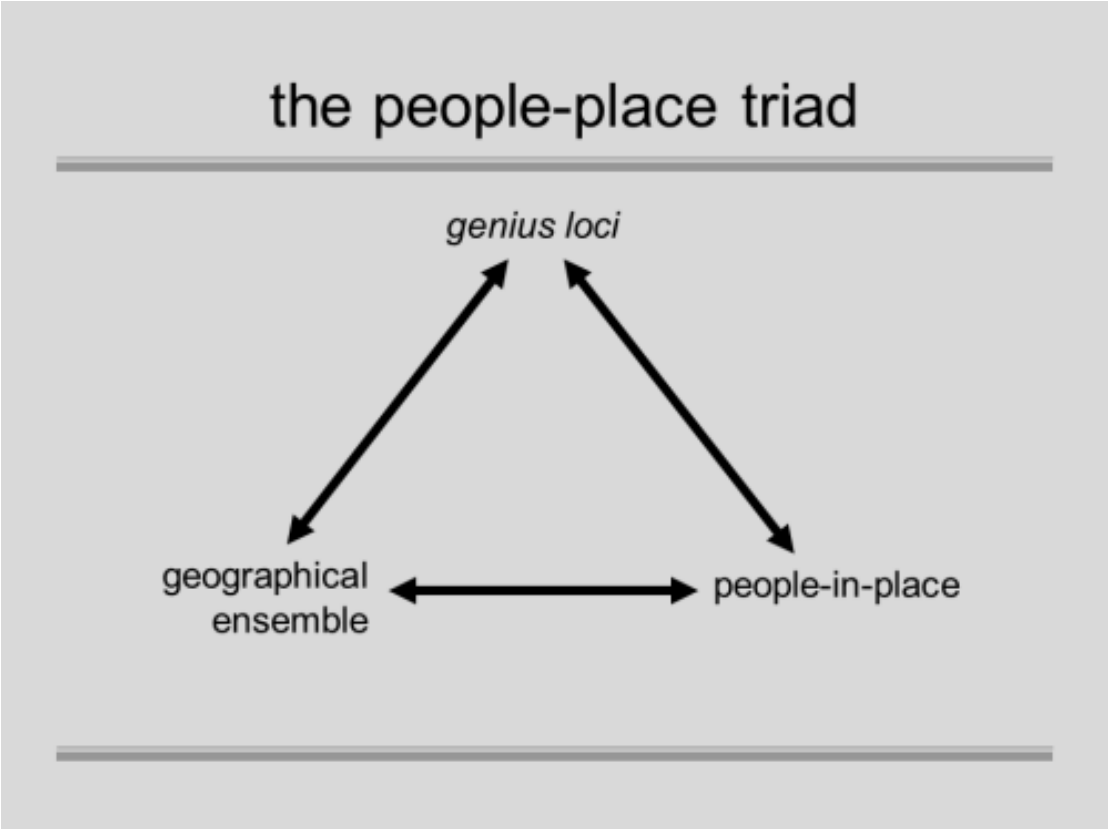


Figure 3.2: The people-place triad (Seamon, 2012, p.10)

The term 'geographical ensemble' refers to the environmental qualities of a place such as its topography, and human-made elements such as buildings and streets.

The term 'people-in-place' refers to the attitudes found in a place, either of individuals or in various groups' actions, routines and events.

The term 'genius loci' refers to the ambience, atmosphere, and character of a place (Seamon, 2012, pp10-11). Seamon argues that *geographical ensemble* and *people-in-place* both contribute to *genius loci*.

Seamon's discussion is similar to Lefebvre's (1991) and Soja's (1996) view of production of a space. Lefebvre (1991) states that space is a social product, a dialectical interaction between a triad of fundamental aspects: *perceived space, conceived space* and *lived space*. *Perceived space* (Lefebvre, 1991) or the *first space* (Soja, 1996) refers to physical space, the material, visible and measurable space. The *conceived space* is the space of scientists, urbanists and architects (Lefebvre, 1991), the *second space*, *imagined representations of spatiality* (Soja, 1996, p.6) and the *lived space* is space of representations, everyday life experience of space, the space of inhabitants and users, associated with symbols, has the same meaning of *place* (Lefebvre, 1991), referred to as the *third space* by Soja (1996).

A.1 Nature of a place:

The *nature* of a place has been at the core of the study of the concept of *place* in the theoretical discourse of many scholars. Norberg-Schulz (1971), Tuan (1974) and Relph (1976) view the nature of a place as a *spirit*, *genius loci*, *topophilia* and *sense of place*, and as such an inseparable part of people's feelings towards a place. Proshansky (1978, 1983), an environmental psychologist, considers the identity of a place to be one of the key aspects giving place its character. This identity includes a community's social beliefs, attitudes, feelings, values, preferences, social meanings and behavioural tendencies towards a physical setting. The physical place has meaning only because it has been socially understood (Burley, 2007 cited in Lewicka, 2011).

The nature and reality of a place is understood through a *lived experience* (Lefevbre (1991). Seamon (1979) views the nature of a place as *everyday lived dimensions* and Massey (1995, p.50) views it as a 'product of the society in which we live'.

Lefebvre (1991) argues that people's everyday life experiences and 'chains of meanings' and feelings construct the nature of a place. People give meaning to a place by responding to their personal experiences of it, Soja (1996, p.29), calls this a *third space*, while Altman and Low (1992) refer to *place attachment*; the bonding between people and their environments. Bourdieu (1990, p.53) calls the nature of a place the *habitus*, and describes it as 'a system of durable, transposable dispositions', which has 'an infinite capacity for generating products-thoughts, perceptions, expressions and actions' (Bourdieu, 1990, p.55).

Social relations have a particular significance for understanding a place. Easthope (2004, p.137) indicates that *place* is more than merely its physical locality, 'place' is a nodal point' that encompasses its psychological and emotional attachments and the social relations which have particular significance to a person or a group. Massey (1995) further argues that people's conception of 'place' is not settled and coherent but has a *changing nature*. In an era of globalization, with flows of international migration and worldwide communications, *place* is also seen as *a melting-pot:*

> *Migrants arrive and settle, bringing with them different cultures and different connections from around the world. The old, settled coherence of the 'locals' may seem to be disrupted* (Massey, 1995, p. 46).

Arnett (2002) also discusses globalization and its positive and negative effects on place. Its main psychological effect is to transform people's identity, the way they think about themselves in relation to the social environment (Arnett, 2002). Individuals actively make 'place' through *material practice*, by keeping out things and people who are seen to 'not belong', and through *imagination* (perception) according to Massey (1995, p.48). Imagination or *perception of places* is socially constructed (Rapoport, 1975, Lefebvre, 1991; Massey, 1995). Hence, in the era of globalization and migration that places have complex bicultural, multicultural, and hybrid

identities (Arnett, 2002; Easthope, 2009), how shall places are perceived/imagined?

The traditional idea of places as settled, coherent areas could be replaced by a concept of place as:

> *a meeting –place, the location of the intersections of particular bundles of activity spaces, of connections and interrelations, of influences and movements (Massey, 1995, p.59).*

Places are hybrid and have a long history of connections with other places according to Massey (1995), and considering the nature of a place, or place 'identity' as a 'pure' entity results in drawing a hard boundary between 'us' and 'them', a geography rejection. Iris Marion Young (1990 cited in Massey, 1995, p.73) asserts that in the interconnected world, we are in need of *unoppressive* cities (places), where differences between people would be accepted, and which are 'open to unassimilated otherness', a city 'without walls'. A city in which notion of identity is not bounded and closed, rather it is open and interactive (Massey, 1995, p.74) (Figure, 3.3).

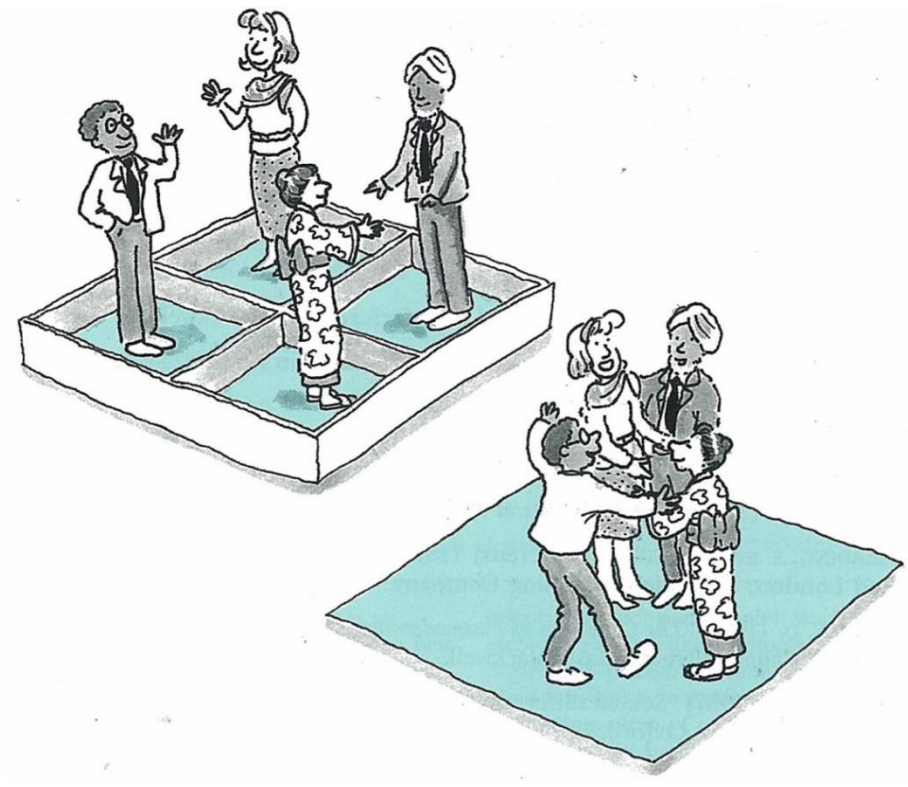


Figure 3.3: Two possible geographies of acceptance (Massey, p.75)

Unlike the physical character of a place, people's activities and behaviours in a place are not limited or bounded to the local area but extend to other places, having an impact upon individual's feelings, emotions and attachments over a period of time (Massey, 1995). Feelings, emotions and attachments shape the 'genius loci' of a place, when people form social bonds to the environment and transform a 'space' into a 'place' (Altman & Low, 1992; Rowles & Watkins, 2003 cited in Wahl & Oswald, 2010). The meanings that individuals attach to a place which enable them 'to make sense of the world' are culturally constructed, 'not fixed in things-objects, events, relationships', rather they are like languages in the way that they 'shift and change historically' (Hall,1995 cited in Massey, 1995, p.183).

Although people tend to bind meanings to places in order to 'give them a *home*', to 'fix identities' and make them 'well-bounded' entities (Hall, 1995 cited in Massey, 1995, p.183), place meanings are not bounded as the culture of a place is not settled, enclosed or internally coherent. Culture of a place is an intersection of different influences [such as media and social media influence] and forces (Hall ,1995 cited in Massey, 1995, p.187).

> *A culture is formed by the juxtaposition and co-presence of different cultural forces and discourses and their effects. It does not consist of fixed elements but of the process of changing cultural practices and meanings. (Hall, 1995 cited in Massey, 1995, p.183)*

The identities that culture constructs may not have same simple origin or be fixed in shared homogenous values and meanings (Hall, 1995). However, in some nations there are retreats from 'difference' and 'heterogeneity' into 'closed' 'homogenous' perceptions of cultural origin, identity and *places* (Hall, 1995, p.205).

A large wave of interest in studying and researching the *uniqueness of place* (Casey, 1997; Gieryn, 2000; Gustafson, 2002 cited in Lewicka, 2010) exhibit such tendencies in societies. Such tendencies for keeping closed homogenous places more likely result in opposition and conflict in urban planning when changes to places such as home and neighbourhoods are perceived as a potential growth of heterogeneity.

A.2 Home as a *place*

'Residential environment' is a term that encompasses home, housing, neighbourhood and community (Tognoli, 1987). It includes *places* such as homes, streets, and parks , and their users from children, to the elderly, both women and men, whose basic needs are fulfilled by living in the environment (Niezabitowski, 1987, Gifford et al., 2011). *Places* differ in scale and one may feel emotionally attached to the relatively small scale of one's room, one's apartment, or one's building, up to one's neighbourhood, district, city and country (Lewicka, 2010). Since the 1970s, the concept of *place* has become a useful theoretical lens for researchers into housing attempting to analyse people's interactions with their physical environment such as their homes and neighbourhoods (Moore, 2000; Easthope, 2004) as it goes beyond from its physicality. Homes are not dwellings/houses it encompasses social relations, experiences, and memories.

Heidegger (1971) considers the relationship between place and the concept of 'dwelling', Bachelard (1964) calls home as a haven and individual's corner of the world and many geographers and phenomenologists in the 1970s (Relph, 1976; Tuan, 1977, 1980; Seamon, 1979; Buttimer, 1980 cited in Moore, 2000) connect home to the concept of place to explain *human bonds* to their homes, emphasising this connection to explain home as an entity beyond its locality and physical structure (Altman & Gauvain, 1981; Gurney, 1990; Benjamin & Stea, 1995; Lawrence, 1995; Rapoport, 1995; Somerville, 1997; Chapman & Hockey, 1999 cited in Moore, 2000).

Phenomenology makes home the primary and central point from which the rest of the world is experienced and defined (Case, 1996 cited in Moore, 2000, p.209)

Since the 1990s, *home* as a place has been studied more than ever, extending beyond its physical structure to focus on its social, cultural and emotive characteristics (Sixsmith, 1986; Giuliani & Feldman, 1993; Moore, 2000; Easthope, 2004). Place theory assists many scholars to explain an individual's and a community's psychological needs and their well-being in relation to their homes and neighbourhood (Easthope, 2004). Individuals' social networks within a community as well as their housing preferences can be studied in depth when home [neighbourhood] is seen as *places* (Easthope, 2004).

In the literature on place theory can be found compilations of lists of meanings that people use to speak of their *home*. The first comprehensive list belongs to Hayward (1975) who includes home as a physical structure; home as territory; home as locus in space; home as self and self-identity, and home as a social and cultural unit (Moore, 2000). Tognoli (1987) also lists and links the concept of home to centrality; continuity; privacy; self-expression, personal identity, and social relationships. Further, Despres (1991) develops ten general meanings or 'interpretations' of *home* based on four categories which are the *territorial interpretation*, *the psychological interpretation*, *the socio-psychological interpretation*, *phenomenological and developmental interpretation* (Despres ,1991).

The ten general meanings are:

1) home as security and control,
2) home as reflection of ones' ideas and values,
3) home as acting upon and modifying one's dwelling;
4) home as permanence and continuity;
5) home as relationships with family and friends;
6) home as centre of activities;

7) home as a refuge from the outside world,
8) home as an indicator of personal status,
9) home as material structure and
10) home as a place to own.

In terms of the four categories, territorial interpretation suggests that there is a *boundary* which marks a place owned by a person or a group (Altman, 1975), and outcomes of territorial satisfaction are security and control (Porteous, 1976; Sebba & Curchman, 1986). The *psychological* interpretation views home as a *symbol of* one's ideas and *values*, as an expression of self (Appleyard, 1979a, 1979b; Werner et al., 1988) and as a place of refuge when it fulfils its role of providing privacy (Finighan, 1980).

The *socio-psychological* interpretation refers to the materials and physical character of a home, the interior such as decorations, and exterior such as landscaping, aspects which interpret the owner's *lifestyle, culture, family status and, personality* (Appleyard, 1979a, 1979b; Rapoport, 1981; Duncan et al.,1985). *Phenomenological* and developmental interpretations theorise dwelling as a natural environment transformed into a home in the *context of everyday life* (Relph, 1976; Tuan, 1977; Dovey, 1985; Korosec-Serfaty, 1985).

The following table (Figure 3.4) was prepared by the author to link the meanings of home to the different interpretation categories along with relevant theorists. It shows that categories are interrelated and for instance 'home as a refuge' can be studied under two interpretation categories, psychological and phenomenological.

Contexts	Territorial interpretation	The psychological interpretation	The socio-psychological interpretation	Phenomenological and developmental interpretations
Meanings/feelings	home as security and control (Porteous, 1976; Sebba & Curchman, 1986)	home as relationships with family and friends	home as acting upon and modifying one's dwelling (Appleyard, 1979a, 1979b; Rapoport, 1981; Duncan et al.,1985)	home as permanence and continuity (connecting people's past and future) (Relph, 1976; Tuan, 1977; Dovey, 1985; Korosec-Serfaty, 1985)
Meanings/feelings	home as a place to own (Altman, 1975)	home as reflection of ones' ideas and values (Appleyard, 1979a, 1979b; Werner et al., 1988)	home as an indicator of personal status (Appleyard, 1979a, 1979b; Rapoport, 1981; Duncan et al.,1985)	home as a refuge
Meanings/feelings		home as a refuge :privacy (Finighan, 1980)		home as centre of activities (Relph, 1976; Tuan, 1977; Dovey, 1985; Korosec-Serfaty, 1985)
Meanings/feelings		home as material structure (shelter)		

Figure 3.4: Contexts and meanings of homes (prepared by the author from Despres's written work, 1991, which author also added the relevant literature to each category)

Furthermore, Moore (2000) set three categories for *meanings* of home:

1) cultural, linguistic and historical context;
2) philosophical and phenomenological context;
3) and psychological context.

The categories indicate that understandings and meanings of the concept of home transcend the material characteristics of domestic space (Lawrence, 1995; see also Altman & Gauvain, 1981 cited in Moore, 2000). Home is a concept too complex to be defined explicitly (Benjamin, 1995) as it is ambiguous (Lawrence, 1995) and confusing (Rapoport, 1995 cited in Moore,

2000). In attempting to define home, Benjamin (1995m p.158 cited in Moore, 2000) separates the physical character of a *home* from its socio-cultural context, the phenomenological and psychological meaning of *hom*e:

> *The home is that spatially localised, temporally defined, significant and autonomous physical frame and conceptual system for the ordering, transformation and interpretation of the physical and abstract aspects of domestic daily life … (Benjamin, 1995, p. 158)*

While *home* as a place refers to physical characteristics, its socio-cultural context carries its meaning. *The* meaning *of home* in history and literature encompasses country or birthplace and land as well as symbolic meanings such as *happiness*; *belonging*; *death*, *the end of life's journey* (Moore, 2000). Since the early 19th century its poetic meanings took in the concept's psychological and phenomenological dimensions of considering home as a domestic hearth, as can be seen in Jane Austen's novel *Emma of 1815: '*There is nothing like staying at home for real comfort' *(cited in* Moore, 2000 *p.209*). According to Tognoli (1987, p658), home is 'a pivotal point around which human activity revolves', Lewicka (2011) expounds its meaning as ownership and as symbolizing family life and happiness, the most preferred place on individuals' evaluative maps (Foland & Lewicka, 2007).

Home includes concepts such as privacy, refuge, security and comfort, a retreat from the outside world (Relph, 1976; Semon, 1979; Tognoli, 1987; Case, 1996; Cooper Marcus, 2006). As such it is a symbol of self-identification and personalization where individual choice is embraced and expressed (Norberg-Schulz, 1971, 1980; Dovey, 1978 cited in Tognoli, 1987). It therefore provides a sense of identity; it contains a landscape of memories (Rowles, 1983, p. 114; Rowles and Watkins, 2003 cited in Wahl and Oswald, 2010, p.115), a continuity connecting people with their past (Bachelard, 1969; Dovey, 1978, and Tuan, 1977 cited in Tognoli, 1987). It is a symbol of unity, order, ritual and sacredness (Bachelard, 1969; Sommer, 1972, and Dovey, 1978 cited in Tognoli, 1987). From this broad array of

definitions, we can see that it has a sociocultural context (Rapoport, 1968 cited in Sebba & Churchman, 1986, Rapoport, 1980), as well as psychological meaning (Cooper, 1974 cited in Sebba & Churchman, 1986).

Home is a physical, and cognitive concept, it is a symbol of departure and return (Tognoli, 1987), it is the central place of human existence (Bachelard, 1969; Dovey, 1978; Jung, 1963; Marc, 1977; Norberg-Schulz,1971; Relph,1976; Tuan, 1977), a socio-spatial entity (Saunders & Williams, 1988 cited in Easthope, 2004), a psycho-social entity (Giuliani, 1991; Poteous, 1976 cited in Easthope, 2004), a whole with many layers of meaning (Rybczynski,1986), an emotive space (Giuliani, 1991; Gurney, 2000 cited in Easthope, 2004) carrying symbolic and metaphorical meanings such as: happiness; belonging (Moore, 2000) and the product of social and political construction (Massey, 1992; Somerville, 1997 cited in Moore, 2000). It is indeed a multidimensional entity that is inseparable from the cultural core of the individual (Tognoli, 1987).

Furthermore, home and dwelling become *a product, process, function, place, behaviour setting, territory, privacy, and a multidimensional entity* evolving around *culture* imperatives (Rapaport, 1980 cited in Tognoli, 1987, p.664). *Culture* in Rapaport's (1980) work refers to *cognitive and symbolic meanings or life-style*. It means inhabitants are perceived as having control over their *setting* when they achieve congruence between life style and their home and neighbourhood (Tognoli, 1987)[7]. Studying *home* as a person-environment system and a multidimensional entity extends the investigation beyond its physical features and brings other concepts such as neighbourhood and community into the research. Lewicka, (2011) also indicates that the scale of home varies, it may be very narrow, or it may reach into neighbourhood. With this in mind, the following section discusses neighbourhood.

[7] Achieving harmony, or *congruence* in a residential setting is crucial in the perception of an individual. For instance, through the concept of the perceived homogeneity of neighbourhoods, it is assumed that stress and conflicts are reduced and predictability is increased, leading to a coherent character (Tognoli, 1987).

A.2 Neighbourhood as a *place*

When studying *home* and *dwelling* in a social context such as a *neighbourhood*, socio-cultural factors such as family structure, lifestyle, privacy, and social relations become primary factors (Tognoli, 1987, Wahl & Oswald, 2010).

> *Neighbourhood is a spatially limited area with structural characteristics of residential and non-residential buildings (size, materials of buildings, density of housing), demographic composition of residents (age, race, class, family status), environmental characteristics (presence of water, greenery, degree of pollution), social-interactive aspects (amount of neighboring, participation in local activities), and sentimental characteristics (identification with the place, historical significance of buildings or district (Galster 2001 cited in Lewicka, 2010, p.37)*

Urban neighbourhoods, as intermediate structures between the *home* and the *city,* allow individuals to connect to a wider society (Nibest, 1962, cited in Holahan & Wandersman, 1987). As with the concept of *homes*, *neighbourhood* includes the physical characteristics of a place, such as street design, housing type and quality of public spaces and the social organization of a neighbourhood including the quality of the social interaction that influences the individuals' satisfaction, attitudes, perception and well-being (Warren, 1981 cited in Holahan & Wandersman, 1987; Farrell et al., 2004; Letki, 2008; Lewicka, 2010; Hipp & Wickes, 2018; Ma et. al., 2018). One of the important social aspects of living in a neighbourhood, is the quality of the social interaction, known as *neighbouring* which will be discussed in the next section.

- **Concept of neighbouring**

The concept *of neighbouring,* which emphasises the quality of social interaction among neighbours, has the capacity to reflect the qualities of the perceived sense of community, the level of satisfaction in a residential setting (Festinger et al., 1950; Fried & Gleicher, 1961; Argyle & Henderson, 1984; Tognoli, 1987; Farrell et al., 2003; Letki, 2008; Lewicka, 2010; Hipp & Wickes, 2018; Ma et al., 2018). According to Woolever (1992), 'The urban neighbourhood remains a thriving place for formal and informal social activities' (cited in Liu & He, 2017, p.297).

At the neighbourhood level, while friendships are influenced by physical characteristics such as nearness (Beck, 1950; Caplow & Forman, 1950), the quality of 'relationship is mediated by the perceived homogeneity of residents and their need for friendships' (Gans, 1967 cited in Holahan & Wandersman, 1987, p.842; Putnam, 2007; Letki, 2008; Hipp & Wickes, 2018)[8].

> *Although propinquity initiates many social relationships and maintains less intense ones, such as 'being neighbourly', it is not sufficient by itself to create intensive relationships. Friendship requires homogeneity (Gans, 1961).*

Gans (1961) asserts that while propinquity provides the opportunity for visual contact it cannot reveal the intensity of the relationships. Neighbours who are homogenous may develop stronger relationships than those who are not (Gans, 1961; Letki, 2008; Hipp & Wickes, 2018). Accordingly, it is likely that the propinquity of homogeneous neighbours may result in more positive neighbouring relations (Warren, 1981; Unger & Wandersman, 1985; cited in Holahan & Wandersman, 1987; Guest et al., 2008). There are a number of research works which claim that heterogeneity in terms of the social and ethnic diversity of neighbourhoods, undermines the sense of community, and

[8] Gans (1967 cited in Michelson, 1970) defines a residential block (two rows of home facing each other with no more than twelve homes) as a basic unit for homogeneity in social class.

negatively affects individuals' interactions and sense of attachment to their *places* (Taylor et al., 1985; Alesina & Ferra, 2002; Costa & Kahn, 2003; Puntman, 2003 cited in Letki, 2008; Leigh, 2006; Greif, 2009 cited in Lewicka, 2011). It affects the number of close friends that individuals have, their general happiness (Stolle et al., 2008 cited in Lewicka, 2011) and their trust in their neighbours (Leigh, 2006 cited in Lewicka, 2011).

Managing heterogeneity, or social diversity, is also discussed by Sandercock (2000, p.14) as a challenge for planning systems in 'cities of difference':

> *what happens when `strangers' become neighbours, when the presence of indigenous peoples or of immigrants from significantly different cultures begin to make their presence felt in streets and neighbourhoods which had hitherto perceived themselves as relatively homogeneous, and how this becomes a problem in and for the planning system.*

Heterogeneity or social *diversity* at the local level, and in particular the neighbourhood level, is usually associated with attitudes towards diverse *socio-economic and cultural demographics* (Sandercock, 2000; Watson, 2006; Letki, 2008, Dunn & Forrest, 2007, 2010, 2011). It has a spectrum from ethnicity, gender, age, race, religion, sexuality to world-view etc. On this spectrum some differences are pre-given and fixed while some are *socially produced* (Watson, 2006) such as racism towards particular cultural groups (Dunn & Forrest, 2007, 2010, 2011). The differences that are socially produced (social stereotypes) can endanger the social capital of a society where social life, networks and trust enable participants to act together more effectively to pursue shared objectives (Letki, 2008).

While the terms homogeneity and heterogeneity include many variables, sociologists agree that *behaviour patterns, values, and interests* are more important criteria for homogeneity than background factors (Gans, 1961). This is supported by Holahan and Wandersman (1987), who note that the extent of neighbours' *willingness and character* to greet and visit each other

enhances social belonging and reduces social isolation in a neighbourhood. Scholars such as Jacobs (1961), Massey (1995); Hogg (2003), Guest et al. (2007) and Fong and Hou (2017) look at heterogeneity positively in a neighbourhood as it may enhance interpersonal relationships and social harmony. Jacobs (1961) also emphasizes the importance of casual social contacts among neighbours which may occur in outdoor public spaces in daily life. Such casual contacts have been found to be an important part of the 'urbanite's social life' and 'sidewalk acquaintanceships' could endure for many years (Holahan & Wandersman, 1987).

In the study[9] of White people's attitudes towards living in heterogeneous neighbourhoods, Guest et al. (2006) argues that while heterogeneous neighbourhoods are perceived less harmoniously, Whites in heterogeneous areas still "agree" (just not strongly) that interpersonal relationships are trusting, helpful and co-operative. For instance, exchange of favours among neighbours is a key component in developing and maintaining social relations among neighbours (Fong & Hou, 2015). Therefore, living in a diverse neighbourhood does not necessarily mean, being in a chaotic or disorderly community (Guest et al., 2008). In the end, in matters of social relations, Guest et al. (2008, p.522) assert that 'The future of ethnically mixed neighbourhoods will depend, of course, on the willingness of individuals to tolerate living in them'.

In the long run, social integration leads to more positive feelings towards 'unlike' people (Guest et al., 2007) and results in feelings of psychological closeness to neighbours, affecting attitudes towards *home* and *neighbourhoods* (Gleicher & Fried,1961).

> *Neighbouring involves the social interaction, the symbolic interaction, and the attachment of individuals with the people living around them*

[9] Title of paper: Heterogeneity and Harmony: Neighbouring Relationships among Whites in Ethnically Diverse Neighbourhoods in Seattle.

and the place in which they live in. …., it is clear that neighbouring plays an important role in people's lives. Neighbouring shapes perceptions of neighbours, influences social interaction …. and neighbourhood viability (Unger& Wandersman, 1985, p.34).

Therefore, *neighbourhood* as a person-environment system is the subject of constant evaluation by its residents. Not only the quality of its physical characteristics affects residents' attitudes and perception, but also neighbourly feeling is a key to enduring attachment to a *home* and its *neighbourhood* as places.

This section concludes that residents are an important part of creating places. Residents' perceptions, conceptions, and lived experiences matter when planning and developing for their places. It is a challenging process when urban planning objectives are not aligned with residents' opinion such as residents' negative opinion of 'diversity' or 'heterogeneity' in neighbourhoods. Therefore, an environmental-psychological and a socio-psychological study of individuals' opinions, enhance in-depth understanding of their places.

B. Planning for a *place*:

The challenge of community resistance

There are three strategies for engaging with the community when planning for a change in a setting or a *place*, Figure 3.5 (Dear, 1990, 1992):

1) Community-based strategies include community education, community outreach (such as public meetings), creating a community advisory board, providing incentives or further facilities to the area.
2) Government-based strategies include local regulations, zoning and mediation to avoid the disputes.
3) Court-based strategies include lawsuits when the previous strategies are not successful in solving the disputes. They are expensive, time consuming, and almost counterproductive to the goal of community integration.

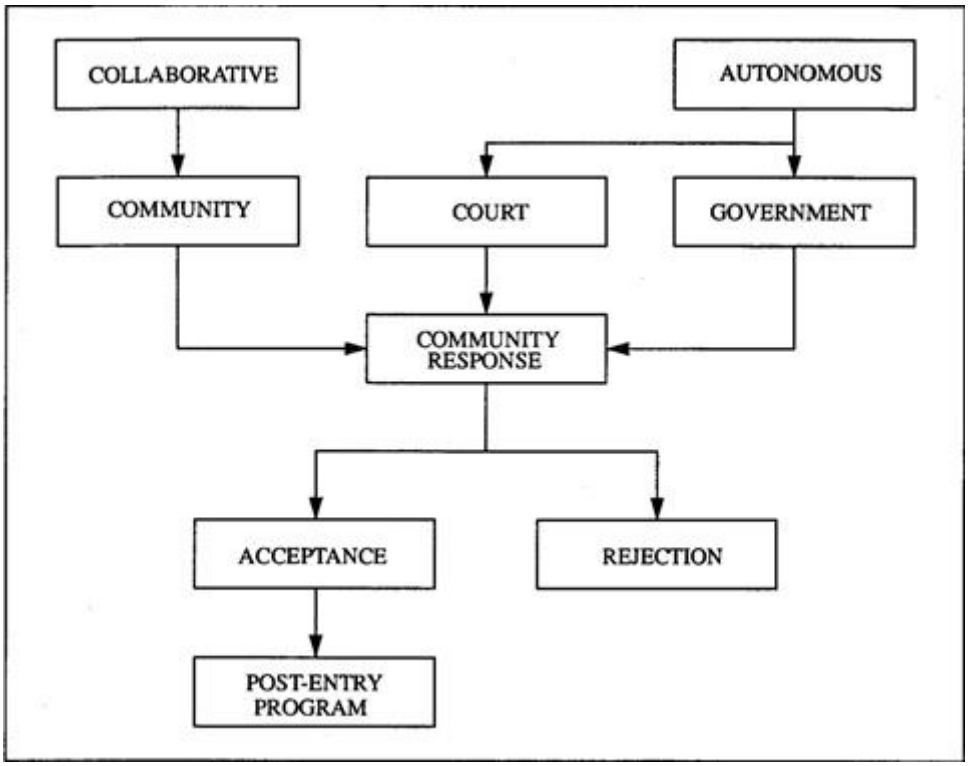


Figure 3.5: Communication strategies (Dear, 1992, p.295)

The first strategy is a collaborative approach, providing a direct contact between different stakeholders, including planners and community, giving rights to the community to participate in decisions affecting their neighbourhood and solving the possible disputes (Healey, 1997; Gunton & Day, 2003). The government-based strategies include local regulations and court-based strategies are legal proceedings for resolving possible disputes (Dear, 1992). The collaborative planning approach develops a shared vision and goals for sustainable outcomes (Moore et al., 2014; Olsson et al., 2004 ; Vacik et al., 2014 cited in Linnenluecke et al., 2017). It assists planners to gain knowledge and ideas from various stakeholders and improves stakeholder relationships (West et al., 2014 cited in Linnenluecke et al., 2017). It mediates conflicts between parties through consensus-building processes by initiating a dialogue in a situation of equal empowerment and shared information, learning new ideas through mutual understanding and creating innovative outcomes (Innes & Booher, 2003; Healey, 2006 cited in Purbani, 2017).

Goodspeed (2016) challenges the collaborative planning approach by questioning whether achieving consensus in a fragmented, politically unstable global culture is possible. Achieving consensus is not the goal of collaborative planning approach rather as Sandercock (2000) argues collaborative planning is providing the capacity for understanding, learning and managing the challenges of co-existence in 'cities of difference'. It is a type of social learning that helps the context, content and process of policy making co-evolve and builds trust between parties (Innes & Booher,1999; Innes & Booher, 2003; Healey, 2006; Ansell & Gash, 2008, cited in Purbani, 2017). Healey (1997, p.321), further states there is a need for developing new ways of managing challenges that rise from co-existence of diverse stakeholders at multiple scales including the micro environments of daily life, neighbourhoods.

Challenges that emerge from collaborative processes such as resistance and conflict are a normal response from parties whose interests may be affected or threatened by the change (Leitch et al., 2008; Pierson, 2008). Therefore, addressing community opposition by just inviting them to several meetings and talking to them about the project (Rifkin & Pridmore, 2001) is a limited consultation and offers no assurance that citizen concerns and ideas will be taken into account, it is simply tokenism (Arnstein ,1969, Figure 3.6) which Pierson (2008) calls a 'bogus empowerment'. If a collaborative process is viewed as a 'bogus' process, residents are left feeling foolish for believing in inflated claims and undelivered promises while project leaders lose credibility and respect (Pierson, 2008).

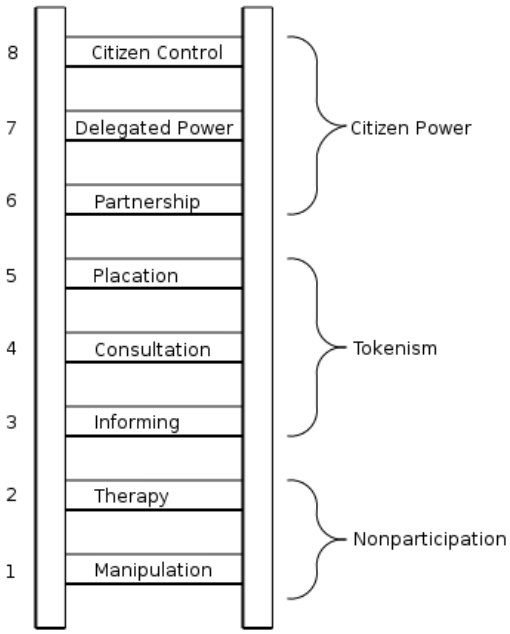


Figure 3.6: Eight stages on the ladder of citizen participation (Arnstein, 1969, p.217)

Furthermore, if the process is seen as a 'tool' not a 'goal', it carries a risk of creating an 'us and them' divide (Dudley 1993 cited in Smith et al., 2014). It has the potential to exacerbate resistance, causing a failure in planning for a place. A genuine collaborative process is a social process, which is built on an understanding of the social values and social relations already existing in a place, (Tiwari & Pandya, 2014). Such understanding encourages moral concepts such as responsibility, trust, respect and loyalty between those leading the process and those being empowered during the planning decision-making process (Ciulla 2004 cited in Pierson, 2008).

Home and neighbourhoods are *places* of a community and when resistance to proposed planning changes occurs during the collaborative process, such changes are viewed by the community negatively, as they make their *places*, *undesirable*. So, in order to understand oppositions and deeper layers of community concerns, a possible way is to ask what *a desirable place* is in the view of a community, what the components of a desirable place are, and what the socio-psychological implications of the components might be.

The following diagram, based on Seamon's (2012, p.10) people-place triad, shows that a *desirable place* includes the preferred physical characteristics, and social characteristics which result in preferred lived experiences (Figure 3.7).

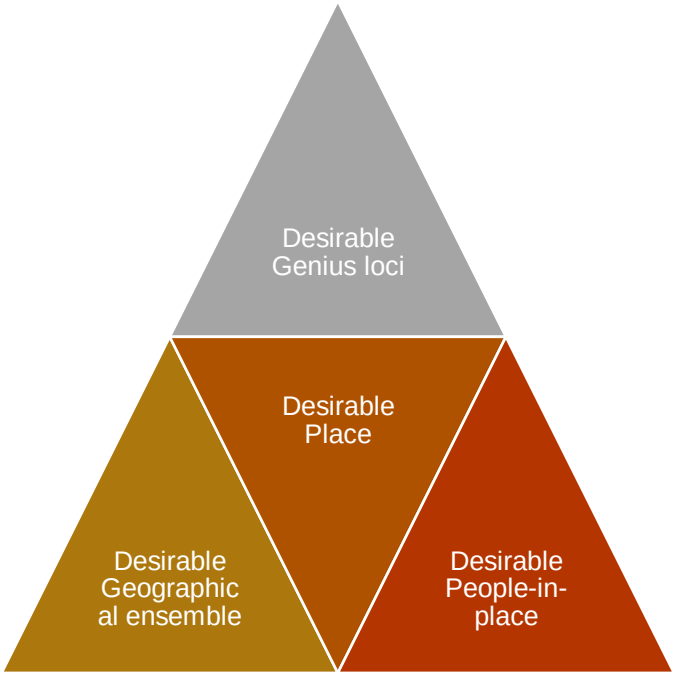


Figure 3.7: Desirable place diagram

Often when community opposition occurs, it is common to view it as a selfish act, which tends to stop the change. However, whether viewing community opposition in such way actually benefits or inhibits the collaborative process will be discussed in the next section.

B.1 Not In My Back Yard

In recent decades, community resistance to urban densification has been a familiar challenge facing state agencies and local councils in Australian cities (Rice, 2009; Rowley, 2012; Cook et al., 2012; Davison et al., 2013; Weller & Bolleter, 2013; Ruming, 2014; Hedgcock & Brunner, 2015; Gurran & Bramley, 2017). The broader community often perceives urban densification as a source of noise and nuisance, loss of privacy, loss of view, loss of open space, overshadowing, crowding, a threat to their property value and social incompatibility or heterogeneity between existing and incoming residents

(DOT, 1996; Smith, 1997; Ainsworth, 2005; Rice, 2009; Dovey & Woodcock, 2010, Scally & Koenig, 2012; Davison et al., 2013; Davison et al., 2016).

> *People do not perceive, understand, or relate to the environment in the same way, nor do they necessarily do so in the way a planner does or intends that they should. (Churchman, 2002, p. 198)*

Residents usually resist in order to prevent unpopular land uses and developments such as jails, drug treatment centres, halfway houses, highways and sanitation truck garages, incinerators, homeless shelters and affordable housing being located in their neighbourhood (Dear, 1992; Inhaber, 1998; Pendall, 1999; Burningham, 2000; Schively, 2007; Davison et al., 2013; Scally & Tighe, 2015; Davison et al., 2016; Sebastien, 2016). Urban densification proposals often face similar challenges as the community expect that the proposals will bring undesirable changes to their *places* (home and neighbourhoods).

Usually, community resistance is ascribed to the NIMBY (Not In My Back Yard) syndrome (Dear, 1992; Pendall, 1999, Ruming, 2014, Gurran & Bramley, 2017, Scally, 2018). Dear (1992, p.288) calls NIMBY 'a community's protectionist attitudes and oppositional tactics for an unwelcome development'. Lake (1993, p. 87) views it as 'a selfish parochialism causing locational conflict'. The NIMBY attitude is usually linked to prejudice and discrimination, depending on different social contexts. It results in residential segregation, preventing the planning system from achieving social objectives (Dear, 1992; Lake, 1993; Pendall, 1999; Scally & Tighe, 2015; Scally, 2018).

Some policy makers may view community concerns as self-interest aimed at protecting their own *turf* (Fischel, 2001; Rabe, 1994 cited in Schively, 2007) or *place*, and view citizen participants as a nuisance (McAvoy 1999, cited in Schively, 2007). They claim that individuals who are active in the opposition are not representative of the whole community, but rather represent only a

vocal minority (in contrast to more tolerant quiet ones), biasing local decision makers' perceptions of community preferences (Groothuis and Miller 1994, Hunter and Leyden, 1995 cited in Schively, 2007).

In contrast many scholars have other views of community opposition (Piller, 1991, Rabe, 1994, Lake, 1993, Healey, 1997, McAvoy, 1998, Pendall, 1999, Snary, 2004, Guiliani, 2001, Innes & Booher, 2003, Schively, 2007). For instance, Schively (2007) says it is a complex phenomenon of nature as there are a variety of participants with a set of complex motivations. Therefore, it is an essential and challenging process to understand the nature of the community opposition in order to respond effectively. Community opposition is a demonstration of democracy; a democratic discourse aimed at promoting better decisions (Schively, 2007) for their *places*, and can even be a way for empowering marginalised groups (Takahashi & Dear, 1997).

Further, Snary (2004 cited in Schively, 2007, p.258) states that planners 'only have a very partial understanding of the nature and relevance of the psycho-sociological basis of public concern'. Therefore, early labelling of community opposition as a NIMBY protest, and taking a negative view of it, may result in a missed opportunity to learn about issues that anger people enough to provoke them to action, as Pendall (1999) warns. It is a missed opportunity to learn about the nature of *places* and the way they can be changed in order to enhance community attachment and satisfaction.

Attributing disagreement about change to a *place* to NIMBY, causes distrust between parties, damaging the genuineness of the collaborative process of planning for a *place* as mentioned earlier. Recognition and understanding of the underlying motivations of such opposition, can benefit planning decisions later on as Pendall, (1999) suggests. Pendall (1999) also indicates that community opposition may indicate that a development is a *burden* on a community, or ultimately there is a *desire* to exclude a specific socio-demographic from the area such as the poor, racial minorities, or families with children. Hence, planners and decision makers have the responsibility of

exposing the underlying layers of the community opposition, such as exclusion of those of a certain race, class, or household status by responding thoroughly to each one of the community's concerns (Pendall, 1999, p.133).

Moreover, Ruming's 2014 study of community opposition in Sydney, also indicates that residents low level of knowledge about strategic planning policies resulted in opposition to higher density housing. Therefore, ascribing local opposition to NIMBY, as an illegitimate and selfish protest, is simplistic as a large proportion of opponents in Sydney expressed their concerns towards urban densification at both metropolitan and suburb levels (Ruming, 2014), stretching their opposition beyond their local neighbourhoods. Therefore, geographical proximity, the idea that the closer residents are to an unwanted development, the more likely they are to oppose it (Smith, 1981, Dear, 1992), is not the only factor, even though it is often considered to be the one universal factor in all NIMBY conflicts. Different factors such as the development's future social characteristics, its type and design, and characteristics of the host community are further contributing factors in shaping community opposition (Dear, 1992).

Lake (1993) takes a similar position to Pendall (1999) suggesting that rather than labelling NIMBYism as 'irrational obstructionism', it should be recognized as an expression of people's needs and fears. Lake (1993) further indicates that NIMBYism is the reflection of our failure as a society:

> *NIMBYism is blamed for virtually all of our failures to solve pressing social problems. Our inability to eliminate environmental degradation, transportation congestion, homelessness, crime, and poverty is ascribed to NIMBY. (Lake, 1993, p.87)*

For instance, he points to the issue of affordable housing in the U.S. He argues that for politicians it is easier to criticize community opposition to affordable housing than to re-examine a political economy that perpetuates poverty. Lake, (1993) cites *Law and Wolch (1991), and Mair (1986):*

> *We attempt daring social engineering to integrate the poor and unemployed into residential communities, but we are politically unable, as a nation, to devise an industrial policy to stem the capital flight that accelerates the unemployment rate. (Lake, 1993, p.90)*

Lake (1993) further warns that failure may undermine community empowerment, if NIMBYism continues to be assigned the role as a villain phenomenon and a selfish parochial obstructionism. It damages community engagement as a collaborative democratic process for planning a *place,* by causing complication for a project (Lake, 1993, Schively, 2007). NIMBY always exists and transparent informative consultation is the key to answer residents' concerns (Jimenez, 2005). In achieving transparency in the consultation process, parties should communicate in regard to impacts, accounting for and responding to perceptions effectively, and have a positive view towards community concerns about the future of their *places* (Schively, 2007). If the concerns seem irrational, they should be solved through opinion adjustment such as educating about the greater social benefits rather than constructing strong legislative and judicial mechanisms (Lake, 1993, p.91).

For instance, in relation to heterogeneity and social diversity in neighbourhoods, Sandercock (2000) points to the limited capacity of existing models of collaborative planning and communicative action in response to 'the core problems, the dark side of difference, namely fear of the other, of the stranger'. She argues that such *fears* sometimes 'mask darker realities such as xenophobia and racism' (Sandercock, 2000, p.21). Sandercock, (2000, pp.15-16) believes that difference and diversity usually become a challenge when the values and norms of the dominant culture are embedded in legislative frameworks. Planning dispute occurs between the attitudes, behaviours, and practices of planners and communities.

Responding to the challenges of such opposition can be possible by revising the planning system or challenging the planning system in the courts, through market strategies (emergence of small businesses), establishing a dialogue, and educating planners to work in cross-cultural contexts (Sandercock,

2000). However, among the possible remedies to tackle the 'fear of other', a *dialogical* approach is an expedient way to manage the challenge in planning system (Sandercock, 2000). Thus, Schively (2007) asserts that work needs to be done in the areas of social psychology related to community perception to find methods of effectively addressing community concerns about their *places*.

> *A clearer understanding of how people think about impacts, information, other participants, and siting processes has the potential to inform the creation of more effective NIMBY (not in my backyard)) and LULU (locally unwanted land use)-siting processes (Schively, 2007, p.264)*

Hence, for gaining an in-depth understanding of community concerns, in another words the socio-psychological implications of their concerns about future changes that will occur to their *places* such as home and neighbourhoods, an environmental psychology approach (micro scale study) can contribute. It enables the collaborative planning process to be productive by increasing the trust between parties.

B.2 Understanding 'place' through Environmental Psychology

Environmental psychology is an interdisciplinary field which encompasses concepts and insights that are also relevant to other disciplines such as architecture, geography, social and behavioural sciences, urban design and *planning.* For instance, the use of environmental psychology's concept of place is evident in many studies of the interactions and relationships between the individuals and their environment (Canter ,1977; Gifford, 1977; Rapport's, 1977; Stokols & Shumaker,1981; Tognoli, 1987; Altman & Rogoff, 1987; Despres, 1991; Altman &Low, 1992; Bechtel, 1997 Speller, 2000; Moore, 2000; Churchman, 2002; Mazumdar, 2005; Scannell & Gifford, 2010; Gifford et al., 2011; Gifford, 2014). It is also utilised for the study of their *places* (Proshansky, 1978; Stokols & Altman, 1987; Steg et al., 2013; Gifford, 2014; Werff et. al, 2016; Berg & Staats, 2018).

Environmental psychology is a 'problem oriented' field, identifying human–environment problems to improve individual lives in a built setting or place (Proshansky, 1978, p.150), in order to make it more humane (Gifford, 2014), reducing the negative impacts on human beings and their environment (Werff et. al, 2016). This approach emerged during the 1960s as a result of scientific and social concerns which emerged in built-environment settings, particularly in large cities (Proshansky & O'Hanlon, 1977; Stokols & Altman, 1987). Social issues, or 'human dilemmas' as Proshansky (1978, p.147) notes, such as overcrowding and deterioration of environmental quality, prompted a rapid expansion of environmental psychology studies during this time (Stokols & Altman, 1987; Berg & Staats, 2018).

Broadly the environmental psychology agenda circulates around 'the translation of a transactional worldview into operational strategies for theory development and research' (Stokols, 1987, p.41). In this transactional view the whole or a *place* is composed of inseparable factors whose definition and meaning depend on one another (Altman and Rogoff, 1987, p.24). This approach aims to develop and test theory to explain the relationships between human beings and their environment or places, suggesting interventions to increase environmental quality and individual wellbeing (Werff et. al, 2016). The 'transactional' approach is evident in Rapaport's (1977, 1982) environment/place research and theory (Altman and Rogoff, 1987). Environment is a complex organization of space, *place*, time, meaning and communication which occur simultaneously. Moreover, culture is an important part of it and helps in understanding the relationship between people, their environment, and 'place' (Rapaport, 1977, 1982 cited in Altman and Rogoff, 1987).

Transactional perspectives are also evident in many phenomenological approaches to person-environment relationships where the concept of place is discussed (Dovey, 1985; Korosec-Serfaty, 1985; Norberg-Shulz, 1971; Relph, 1976; Seamon, 1979, 1982, 2012; Tuan, 1974, 1977, 1980, Lefevbre,

1991; Soja,1996). Relph (1976, p.34) emphasizes the people and place relationship by saying: ‘people are their place and the place is its people, and however readily these may be separated in conceptual terms, in experience they are not easily differentiated’. This relationship is subjective and experiential and can be understood through meanings and feelings that people attribute to their places (Altman & Rogoff, 1987).

Tuan (1974, 1977, 1980), Saile (1977, 1985), Altman and Gauvain (1981), Easthope (2004), Lewicka (2011), Bonaiuto et al., (2015) and many of the above-mentioned scholars use a phenomenological approach to describe homes, buildings, cities, and regions as *places* where environmental and psychological experiences are inseparable.

> *A physical environment or space becomes a place when psychological experiences involving meanings, actions, and feelings become attached to it (Altman & Rogoff, 1987, p.31).*

Further, the fields of urban planning and environmental psychology can reciprocally contribute to each other in order to achieve high quality lives for people in their places such as neighbourhoods. Understanding the way people perceive, think and feel towards their built environment helps planning decision-making processes to be effective (Churchman, 2002).

Environmental psychology can build such understanding as it is a ‘people centred field’ that studies people’s needs and preferences (Churchman, 2002, p.192), feelings, beliefs and attitudes (Bechtel 1997; Gifford 1997; Churchman 2002).

Furthermore, such studies can contribute to urban planning particularly of small scale environments such as neighbourhoods as Churchman (2002) argues.

> *The lens used in planning is more a zooming-out one, and that used in environmental psychology is a zooming –in one (Kidder & Fine 1987, cited in Churchman 2002, p.192).*

When community opposition rises against a planning proposal, deeper understanding of people's concerns (socio-psychological reasons), contributes to the community engagement process. Achieving such deeper understanding, by adopting an environmental psychology approach, can identify relevant intervening variables and characteristics of a place, and the required strategies that need to be undertaken to fulfil the needs of persons and groups. In this way, the benefits of the implementation of urban policy can be maximised and the cost minimised, in other words connecting a context to planning objectives (Churchman, 2002, p.196). Therefore, the following section reviews the environmental psychology literature in relation to the community perception of *home and neighbourhood*, in order to identify the features that affect perception.

B.3 Community perception of 'home' and 'neighbourhood'

The units of home and neighbourhood *as person-in-environment systems,* operate dynamically toward long and short term goals, where disruption in one will affect the perception of the other (Wapner, 1981 cited in Altman & Rogoff, 1987). They include physical features, socio-cultural rules and norms, and other people (Wapner, 1981 cited in Altman & Rogoff, 1987)[10]. Hence, evaluation of home and neighbourhood as *places* is usually concerned with people's perception, preferences, satisfaction and place attachment (Tognoli, 1987). For instance, residential satisfaction is the experience and/or evaluation of pleasure or gratification deriving from living in a specific place (Canter, 1977 cited in Bonaiuto et al, 2003). It is an evaluative process providing a broad attitudinal and cognitive understanding of a *place* (Wahl & Oswald, 2010). Such process depends on an individuals' age, socio-economic status, personality, values and relationships with neighbours (Gifford et. al, 2011).

[10] In the second stage of data collection, by conducting interviews, the relationship of interviewees to their environment and neighbours were studied to better understand the person-environment system.

Residential perception is usually an evaluation of *physical qualities* such as privacy and size of dwelling, as well as *social qualities* such as the socio-economic status of residents and their relationship to one another (Taylor & Townsend, 1976; Volkman, 1981; Tognoli, 1987; Wahl & Oswald, 2010). Also in the literature, Perceived Residential Environment Quality Indexes (PREQIs) are developed and categorised in six macro evaluative criteria or dimensions (Figure 3.8) for understanding a residential neighbourhood as a place. They include architectural and planning features, socio-relational features, functional features, contextual features, neighbourhood attachment and residential satisfaction (Bonaiuto, Fornara, & Bonnes, 2003, 2006 cited in Bonaiuto et al., 2015).

Criteria	Scales	Factors
1) Architectural/ urban planning space features	Visual-perceptual space: Architectural and town-planning spaces	Building Volume
		Building Aesthetics and Density
	Practised space: Organization of accessibility and roads	Internal Practicability
		External Connections
	Green areas	Green Areas
2) Socio-relational features	People and social relations	Security, Discretion, Sociability
3) Functional features	Welfare Services	School Services
		Social-Care Services
	Recreational Services	Socio-Cultural Activities
		Sport Services
	Commercial Services	Commercial Services
	Transport Services	Transport Services
4) Contextual features	Pace of Life	Relaxing vs. Distressing
		Stimulating vs. Boring
	Environmental Health	Environmental Health
	Upkeep	Upkeep
5) Neighbourhood attachment	Neighbourhood Attachment	Neighbourhood Attachment
6) Residential satisfaction	Residential Satisfaction	Residential Satisfaction

Figure 3.8: Summary of residential environmental features affecting perception (source: reproduced by the author from Bonaiuto et al., 2015, p.59)

Architectural and planning features include built forms, *socio-relational* features include security and people social relation, *functional* features include the availability of various services, *contextual* features include the general social and physical conditions such as living in a relaxing and clean neighbourhood, *neighbourhood attachment* includes the level of belonging to the area such as feeling to be part of a neighbourhood and *residential satisfaction* includes the level of satisfaction, and whether an individual would like to continue living in a neighbourhood.

Among the criteria, *neighbourhood attachment* can predict residential satisfaction (Bonaiuto, 2004 cited in Bonaiuto et al., 2015). Residents with higher place attachments are more involved in their communities and more likely to protect their neighbourhood character (Mesch & Manor, 1998 cited in Anton & Lawrence, 2014). They are usually satisfied with the current experience of their home and neighbourhood in terms of physical quality and social quality (such as relationships with neighbours) (Volkman, 1981 cited in Tognoli, 1987). *Place* attachment enhances individual quality of life, psychological health, positive social relationships and greater satisfaction with the physical environment (Tartaglia, 2012). However, place attachment may also have reverse effects such as established residents perceive newcomers as threatening to their way of life and the psychical and social characteristics of the area (Fried, 2000; Anton & Lawrence, 2014).

Therefore, evaluation of residents' place attachment, their level of social interaction, and housing preferences, reveal an individual's and communities' level of satisfaction with their residential environments (Stokols et al., 1978; Stokols & Shumaker, 1982; Tognoli, 1987)[11]. This also affects perception of their neighbourhood. For instance, if there are feelings of isolation,

[11] Furthermore, the relationship between a person and their residential setting is seen as an evolving one as individuals' satisfaction with their environment is affected by their attitudes, emotional responses, and behaviours which are not static either (Brickman and Campbell, 1971; Tognoli, 1987).
Furthermore, if an individual experiences or perceives a negative relationship with his or her place of residence, a motivation to seek harmony or stop the negativity may occur in order to adapt and cope with the situation (Tognoli, 1987). In another words when there is a negative state between an individual and his or her residence, either the home or neighbourhood, an individual will attempt to achieve the most harmonious relationship between self and residence (Tognoli, 1987).

alienation, dislocation, or a desire to move from a neighbourhood, it shows the existence of a negativity or undesirability in the environment/neighbourhood setting (low level of satisfaction). Negative reactions to home or residence are most often the end states, caused by antecedent conditions such as architectural style, social or physical density, economic deprivation and etc. (Tognoli, 1987).[12]

Therefore, studying a community's evaluation of their current neighbourhood and their preference for the proposed change, helps to understand the features that may cause negativity or positivity in the perception of their neighbourhood. This contributes to a collaborative planning process such as community engagement workshops and enables a productive discussion about the proposed changes. The changes that will increase a community's level of satisfaction with their neighbourhood.

Summary of the chapter

Discussion of the concept of 'place' demonstrates that community perception of a place goes beyond its physical features and includes socio-cultural features. The desirable place diagram depicts the components that result in a desirable/preferred lived experience of a community. 'Home' and 'neighbourhood' as 'places' carry socio-cultural meanings which influence community perception. Therefore, when community resistance occurs, it is an attempt to keep a *place* desirable. Usually the views of planners towards community resistance are negative, indicated by referring to it as a NIMBY reaction, and accusing a community of having narrow-minded views. This study adopts an alternate, environmental psychology, approach in its investigation of case studies and investigates socio-psychological reasons for community concerns. Finally, 'home' and 'neighbourhood' features in the field of environmental psychology were discussed, these form part of the case studies framework in the following chapter.

[12] The negative state means feelings of isolation, alienation, dislocation, desire to move home, stress and strain and many others (Tognoli, 1987). In response to the negative state and seeking harmony, some people may decide to redecorate their home, change social relationships by opening up territorial boundaries or even tightening them to achieve a greater privacy (Tognoli, 1987)

CHAPTER 4

Methodology

Introduction

As stated in earlier chapters, the aim of this study is to explore the reasons behind community opposition to increasing urban density. This chapter discusses environmental psychology as a methodological approach to understand socio-psychological reasons for the community's concerns.

This approach will identify effective ways of engaging the community in planning processes by proposing changes that respect community perceptions and attitudes. The research framework will identify the methods of data collection used in the study including research design, case study selection, data collection methods and data analysis techniques. Issues of research ethics and bias will also be outlined and discussed.

A. Research approach

An environmental psychological approach is adopted in this study in order to investigate the underlying reasons for community opposition to densification. As stated in previous chapters, this approach is a transactional analysis of the dynamic interplay between people and their everyday environmental settings (Stokols, 1987, p.42). It is also a contextual approach which widens the scope of analysis and explains the relation between the target variable of density perception, and contextual variables such as demographic and socio-cultural characteristics. The approach also identifies the causes of occurrence of opposition (Stokols, 1987). Understanding of the meanings or feelings people assign to an issue, is central to the study of a problem (Canter, 2016). In order to understand assigned meanings, people's perception of a desirable place needs to be studied at the neighbourhood level as depicted in Figure 4.1.

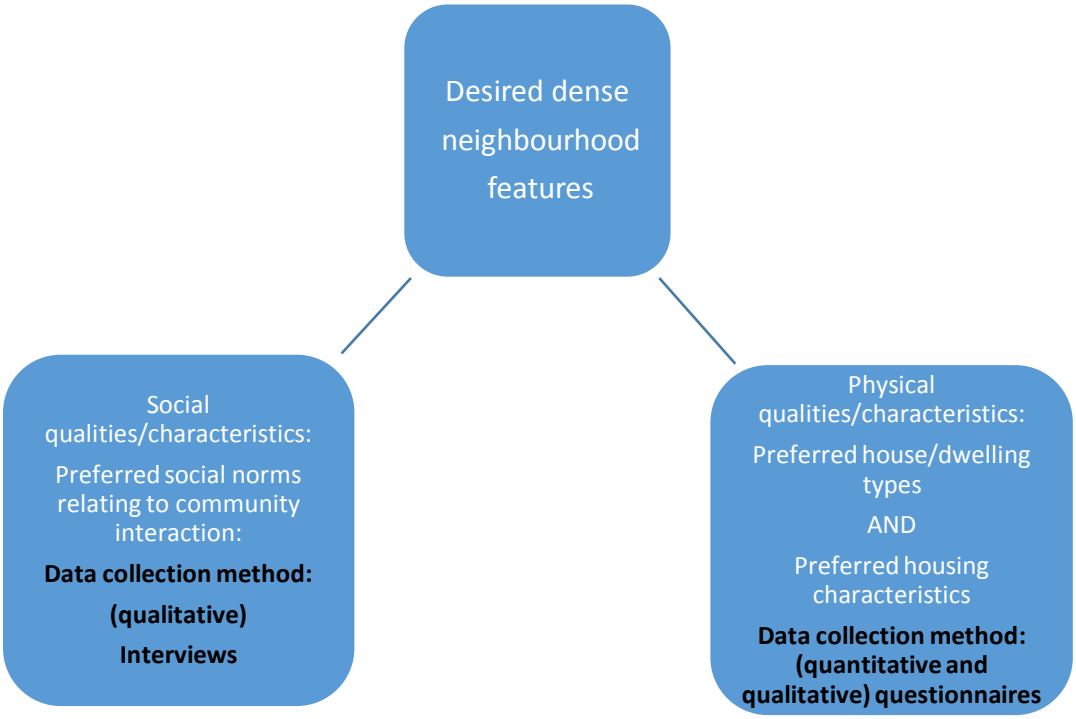


Figure 4.1: Desirable Dense Neighbourhood framework (prepared by the author)

For the purposes of this study a *desirable dense neighbourhood* is seen to be comprised of:

- Physical qualities and characteristics:
  - (a) Preferred house/dwelling types (including those physical aspects such as desired height).
  - (b) Preferred housing characteristics (including features such as privacy, available views, number of floors, etc.).

- Social qualities and characteristics: preferred social characteristics (social norms relating to community interaction).

To identify features that respondents might use to construct the concept of *desirable dense neighbourhoods*, a selection of features from an Australian housing study is used as a basis for developing questionnaires (Kelly et.al, 2011). The study uses a table of variables to investigate people's housing choices (Figure 4.2).

This table was compiled after interviews and an extensive literature review by the Grattan research team and it demonstrates four main characteristics and/or categories that influence people's housing choice. Each category includes social and physical features.

Convenience and Access	Attractiveness of environment	Safety and Security	Dwelling Features
Little traffic congestion in the area	A natural environment you find attractive	Away from jails/correctional facility	#of bathrooms/en-suites
Near a bus, tram or ferry stop	A particularly clean/unpolluted area	**Has secure parking**	#of bedrooms
Near a golf club	A neighbourhood design you find attractive	Safety of people and property	**#of floors(for apartments)**
Near a hospital	Near a park or reserve		#of living spaces
Near a local swimming pool	Near community gardens, or garden space		Has a big garden
Near a pre-school	**A mix of different housing types in the neighbourhood**		Has a fireplace
Near a railway station	Near a national park		Has a garage
Near a school or university	Away from a cemetery		Has a gym
Near a shopping centre	Near an airport		Has a home cinema
Near aged-care facilities	Near railway lines		Has a separate dining room
Near cafes and restaurants	**A diverse mix of people in the neighbourhood**		Has a swimming pool
Near family and friends			Has a tennis court
Near general health services			Has aged-friendly design
Near local shops			Has air-conditioning
Near nightlife(i.e. pubs)			Has an outdoor dining space
Near recreational facilities			Has double brick walls
Near the beach			Has floorboards
Near the CBD			Has walk-in wardrobes
Near work			Has weatherboard cladding
			Presence of a city view
			Presence of a water view
			Whether the dwelling is on stilts or a concrete slab
			Whether the house is detached

Figure 4.2: Variables in the survey (Source: The Housing We'd Choose, Kelly et al., 2011, p.40)

For the purpose of this study, relevant social and physical neighbourhood features were chosen in each category to investigate people's *desired dense neighbourhood* features (Figure 4.2). As case studies are extended to 800 meters of train stations not the whole neighbourhood, inevitably some features of the table (Figure 4.2) are irrelevant to be included in the survey. For instance instead of including 'local park' as a physical feature which is

usually located out of 800 meters of train stops, similar physical features were included in the questionnaires. Physical features include well-designed pedestrian plazas and paths, high quality public open space such as BBQ and kids play area, high quality landscaping of the precinct, well-designed biking lanes. For services and infrastructure features: walking to services such as shops and public transport, more pedestrian friendly environment than car oriented, were included in the questionnaires.
Further, features such as proximity to the CBD, proximity to a train station, a diverse mix of people in the neighbourhood, a mix of housing types in the neighbourhood, secure parking and number of building floors were incorporated in the questionnaire.

B. Case study research

Case study research has a central position in human-related disciplines, including sociology (Gerring, 2007). Two approaches have been adopted in social research, the cross-case method where many cases are studied at a superficial level and the case study method, where a few cases are studied more intensively (Gerring, 2007). Case study research is the preferred method among other methods when the main research question intends to explore the causes of an issue (Yin, 2014) such as the main research question of this study; *why does a community oppose high-density developments and/or increasing density in a neighbourhood? As Hays (*2004, p.218) tells us: 'Case studies seek to answer focused questions by producing in depth descriptions and interpretations over a relatively short period of time'.

Case study research involves uncovering new and unusual explanations, interpretations and cause-effect connections (Hays, 2004). It is also a method for developing expertise in a field through examining the details of an issue via the production of in-depth reliable information (Flyvbjerg, 2006,). Case study research investigates the micro to macro links in a social study -

a form of cross-level inference intended to gain an in depth understanding of an issue (Hays, 2004; Gerring, 2007). It helps to test a theoretical model, and to investigate and explain causal mechanisms (Gerring, 2007). It is also a good way to test hypotheses (Flyvbjerg, 2006).

As a comprehensive research strategy, case study research encompasses the logic of research, data collection techniques, and specific approaches to data analysis (Yin, 2003 & 2014). While traditionally perceived as a qualitative method, it may have multiple cases and quantitative and qualitative evidences (Yin, 2014), employing triangulation (multiple sources of evidence) for the validation of its results (Gerring, 2007). Case study research can have a mix of quantitative and qualitative evidences while it does not always need direct observations as a source of evidence (Yin, 2003). Such a research strategy has its own sceptics, and its reliability and validity have been criticised for a lack of rigor and inadequate basis for generalization (Yin, 2003, Flyvbjerg, 2006, Gerring, 2007). One of the main reasons behind this conclusion is lack of clear steps in screening or testing an investigator's ability to undertake in-depth case study exploration (Yin, 2003). However, Flyvbjerg (2006) indicates that a case study approach has a different rigour test of its own:

> A case study has its own rigor, different to be sure, but no less strict than the rigor of quantitative methods. The advantage of the case study is that it can "close in" on real-life situations … (Campbell,1975 cited in Flyvbjerg, 2006, p.235).

Summarizing and generalizing from case studies can often be difficult due to the realities they reflect, rather than any limitation of case studies as a research method (Flyvbjerg, 2006). However, Hays, (2004) asserts that generalization is possible when it is based on several studies of the same issue and also that case study research allows its readers to give meaning to the gathered information and draw their own conclusions.

There are five common criticism of case study research (Flyvbjerg, 2006). Firstly, it is commonly perceived that such research is practical, context-dependent knowledge and is not on a par with theoretical, context-independent knowledge. Secondly, it is not scientific research and generalisations cannot be made from a single case study; thirdly, it generates hypotheses rather than testing them for theory building. Further (fourth and fifth), it is biased as draws conclusions from specific case studies and is unable to develop general propositions. However, Flyvbjerg (2006) argues that doing 'a *good* case study research' (my italics) can overcome these criticisms.

In accordance with these perspectives, three case studies have been chosen and quantitative and qualitative research methods undertaken to test the hypothesis and develop rigorous conclusions. The quantitative results have been analysed and validated mathematically while qualitative results have been analysed through discourse analysis which will be discussed further in later chapters.

C. Research design

Research design is a logical sequence of activity that connects the collected data to research questions and finally to forming conclusions (Yin, 2003). It is a logical plan for progressing from questions to answers through the collection and analysis of relevant data. Four steps have been identified in this process (Philliber et. al 1980, cited in Yin, 2003, p.21):

- What questions to study?
- What data are relevant?
- What data to collect?
- How to analyse the results?

In accordance with these questions, the following components are considered essential to case study research (Yin, 2003, p.21):

a) Study questions
b) Propositions (something that should be examined)
c) Unit/s of analysis
d) The logic linking the data to the propositions (data analysis)
e) The criteria for interpreting the findings (data analysis)

In the context of this research approach the current study has been developed on the following basis:

a) Research Question: *why does a community oppose high density developments/increasing density in a neighbourhood?*

In order to avoid simplistic explanations of community opposition inherent in the concept of the NIMBY syndrome, a theoretical approach was developed around the idea of *desirable place* to develop the following propositions*:*

b) Propositions:
- *What are the physical and social features of a desirable place identified by a community?*
- *What are the socio-psychological implications of preferred and undesired features?*

c) Units of analysis (case studies): *Residents living in Transit Oriented Development catchment areas, designated as high density areas in current planning documents*

d) and e) Data analysis: *Consists of examining, categorising, tabulating, testing and combining quantitative and qualitative evidences to address the study's propositions* (Yin, 2003, p.109). Categorising and tabulating of questionnaires data (quantitative evidence) were done by using excel filtering option, creating graphs for each case study and are presented in chapters six, seven and eight. In chapter nine aggregated data are

presented through graphs. Interviews (qualitative evidence) were analysed thematically and are discussed in chapter ten.

The next sections will further discuss ‘units of analysis’, i.e. case studies, data analysis strategies, data collection methods, data analysis techniques, and issues of ethics and bias in the research.

C.1 Units of Analysis: Case studies

Studying community opposition through case studies helps to develop a context-based knowledge of the real-life experience of communities (Flyvbjerg, 2006) and will identify possible causes of opposition. Although it has been argued that case study research is not suitable for generalization in addressing the main issues causing community opposition, the context of each case study will shed a light on possible contributing factors (Flyvbjerg, 2006) in evaluating the community’s capacity to accept increased density.

There are two approaches to the selection of case studies as outlined in Figure 4.3; random selection and information-oriented selection. An ‘information oriented’ strategy has been determined to be the best strategy for pursuing this current research as it will maximise the value of information from each single case and allow generalisations to be developed from the results (Flyvbjerg, 2006). Flyvbjerg (2006) recommends the strategic selection of case studies provides the greatest insight into cause and effect, as opposed to a random sample which may only identify the symptoms of a problem.

Strategies for the Selection of Samples and Cases

Type of Selection	Purpose
A. Random selection	To avoid systematic biases in the sample. The sample's size is decisive for generalization.
1. Random sample	To achieve a representative sample that allows for generalization for the entire population.
2. Stratified sample	To generalize for specially selected subgroups within the population.
B. Information-oriented selection	To maximize the utility of information from small samples and single cases. Cases are selected on the basis of expectations about their information content.
1. Extreme/deviant cases	To obtain information on unusual cases, which can be especially problematic or especially good in a more closely defined sense.
2. Maximum variation cases	To obtain information about the significance of various circumstances for case process and outcome (e.g., three to four cases that are very different on one dimension: size, form of organization, location, budget).
3. Critical cases	To achieve information that permits logical deductions of the type, "If this is (not) valid for this case, then it applies to all (no) cases."
4. Paradigmatic cases	To develop a metaphor or establish a school for the domain that the case concerns.

Figure 4.3: Strategies used in the study for case study selection in this research (pink colour) and data collection methods (blue colour). (source: Flyvbjerg, 2006, p.230)

Three dimensions have been considered in selecting case studies: distance from CBD, demographic characteristics and density target (as per the Activity Centre category in state planning policy 4.2). There are seven categories and more than 100 activity centres as mentioned in State Planning Policy 4.2 document (Figure 4.4). Therefore, out of that number, three different case studies/contexts (Figure 4.5) were chosen to obtain information about the significance of a range of variables in defining a community's desired level of density.

Activity centre hierarchy	Capital city	Strategic metropolitan centres	Secondary centres	District centres	Specialised centres	Neighbourhood centres	Local centres
Numbers	5 centres	10 centres: including **Cannington**	19 centres: including **Victoria Park, Warwick (pilot case studies)**	72 centres: including **Canning Bridge**	5 Centres	There is no number or names in the government documents. **Wellard is considered as a centre under this category**	There is no number or names in the government documents.

Figure 4.4: Activity centres categories and numbers (Source: author produced the table from State planning policy 4.2, WAPC, 2010).

Canning Bridge TOD area, the first case study, is located in an established affluent suburb, 7 km from the CBD. It has been designated as a 'district centre' in Directions 2031 (WAPC, 2010) with an associated targeted density of R90 (90 dwellings per hectare). Cannington TOD area, is the second case study, located in an established middle-class suburb, 12 km from CBD. It is assigned as a 'strategic centre' in Directions 2031 (WAPC, 2010) with a target density of R135 (135 dwellings per hectare). While Wellard, the third case study, is a newly built TOD area, located 35km from CBD and is attracting middle to low demographics. It is designated as a 'neighbourhood centre' with a proposed target density of R75 (75 dwellings per hectare) (WAPC, 2010).

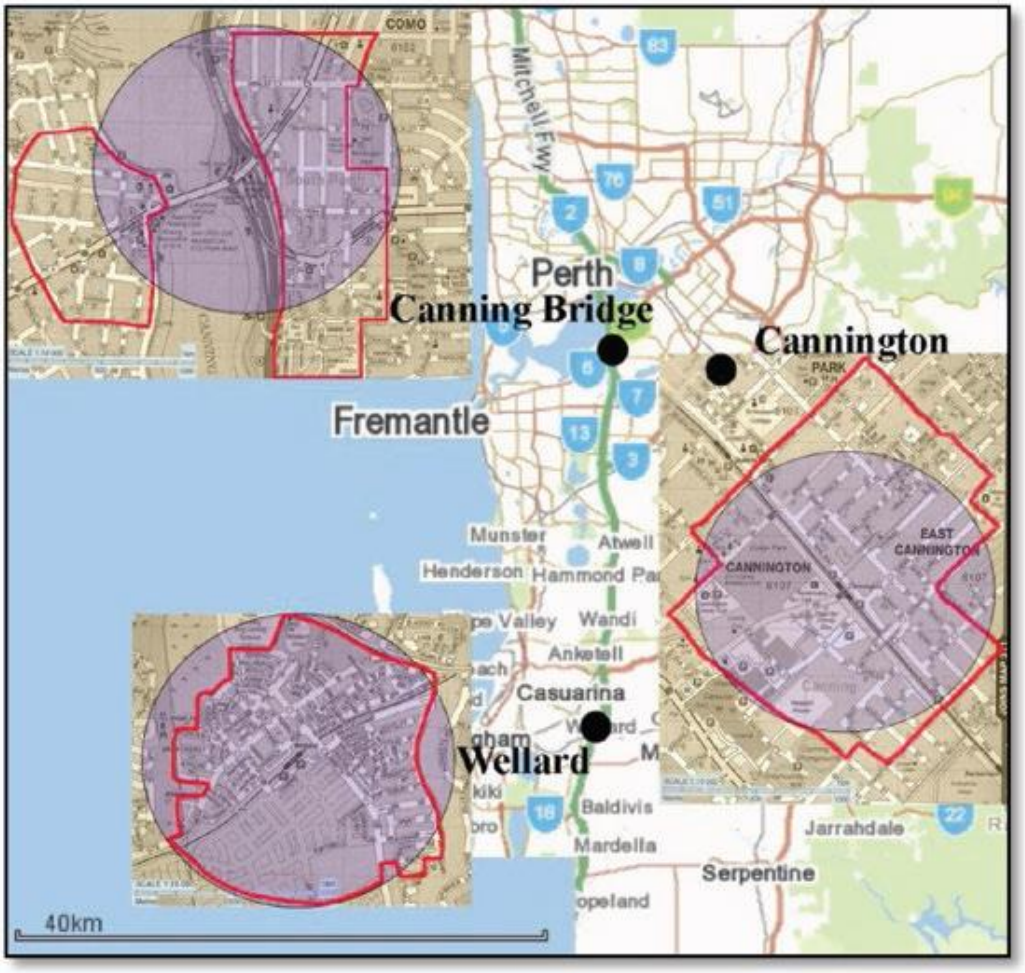


Figure 4.5: Case study areas in Perth Metropolitan Region: from closest to farthest to the CBD: Canning Bridge, Cannington and Wellard. Purple circle indicates catchment area (800 metres from train station); the red line presents the extent of data collection. (Prepared by the author)

C.2 Data collection methods

The data collection process for the case studies was divided into two parts. Initially questionnaires were distributed to residents within the defined catchment areas of train stations in 2012. This was followed by conducting in-depth interviews with selected questionnaire respondents in 2014. This combination of quantitative and qualitative methods provides increased insight and capacity to explore a concept (Creswell, 1994; Oishi, 2003; Taylor, 2005). In addition, it enables the researcher to enhance and elaborate

upon understanding gained from one method by using another method (Creswell, 1994, p.184)[13].

A major disadvantage can be the temptation to use the qualitative part of the research to match the findings of the quantitative results (Creswell, 1994). However, interviews can also be seen to help a researcher gather opinions, facts, and stories, and gain an insight into the experiences of others from the 'inside' (Oishi, 2003, p.173). Interpretations can be made, and conclusions drawn from quantitative and qualitative methods while comparing the results from both methods (Taylor, 2005), helping to find out whether the results are congruent or incongruent with each other (Taylor, 2005).

A questionnaire comprised of 18 questions was designed, targeting resident perceptions of the physical and social aspects of a *desirable dense* neighbourhood within close proximity of train stations. Initial questions investigated attitudes to the current character of the area (understanding the current issues of a neighbourhood). Further questions targeted residents' perception of preferred dense development (physical and social features) in the area, corresponding to the dimensions depicted in Desirable Dense Neighbourhood framework (Figure 4.1). The aim was to study the extent of community trade-offs between housing, location and lifestyle. The features that were asked about were derived from housing and great neighbourhood literature as discussed in the previous chapter. Appendix A includes the questionnaire format.

The reasons behind residents' choices were also probed to understand the cultural characteristics of the areas. In some questions residents were asked to explain the reasons behind their choices in a few words; those words have been used as qualitative data to support some results from the quantitative

[13] It is called 'dominant-less dominant design' model by Creswell.

questions. To validate the questionnaire results mathematically, a margin of error (statistical confidence), has been calculated using R software[14].

The data collection strategy employed for the questionnaire stage used random selection (Figure 4.3). A random sample of people living in train catchment areas were targeted to allow generalisations to be formed for each case study. Addresses were randomly selected from 'Nearmap' and Google map websites, and questionnaires were sent via post. Prior to the major survey, two smaller scale pilot studies were conducted. Such pilot studies have the benefit of identifying potential confusion and possible problems in conducting the major survey and allow for further adaptation or redesign (Litwin, 2003). The pilot phase of the study comprised the sending out of 100 questionnaires to Warwick and Victoria Park TOD areas (50 each) to test the question format, flow and the response rate. 17 out of 100 responses from the pilot study distribution showed that in order to get more responses other methods such as online questionnaire distribution had to be included. Some questions were also revised to generate more quality responses.

To allow for statistically significant conclusions, a target 'response size' of 300 was established (chapter nine, aggregated data of all case studies). 2070 questionnaires were sent out to the three case studies in October 2012 and 296 responses were received back. Of the 296 responses, 163 were from Canning Bridge (total questionnaires sent: 893), 79 from Cannington (total questionnaires sent: 739) and 54 from Wellard (total questionnaires sent: 438). Almost 14.3 per cent of the distributed questionnaires elicited a response. The second part of data collection, the interview stage, was designed to obtain deeper information on a particular issue[15] raised from the outcomes of the questionnaire. Hence, random sampling was replaced with

[14] For example, where dwelling types or features are compared, the alternative hypothesis is one-sided (examining the confidence in one dwelling type or feature, being more selective than the other). The reported p-values are the probability of null hypothesis (complement of alternative hypothesis) (Dalgaard, 2008). For example, if it was intended to measure the probability of medium density being more preferred than low density and the p-value is 0.007, this means that 99.3 per cent of any other studies of the population will show that medium density is more desirable than low density.

[15] Disagreement to social diversity, the socio-psychological aspect of a dense neighbourhood.

stratified sampling, used to interview the respondents who asserted their disagreement with the feature.

Of the 296 questionnaire respondents[16], 121 people left their contact details indicating their willingness to further contribute to the research process. While the number was high, the respondents who disagreed with the particular feature (diversity) hardly left any contacts. Therefore, it was decided to widen the target group and include the ones who had positive views towards the feature. Of 121, only 15 persons were willing to allocate their time for interviews. Many emailed that they moved their home or didn't reply or answer their phones. Finally, 15 interviews were conducted across the case study areas as follows: Canning Bridge 6, Cannington 5 and Wellard 4[17]. Prior to the interviews taking place, two pilot interviews were conducted from the Warwick area to test the order, comprehensibility and format of the interview schedule. Each interview was conducted at the work place of the interviewee or local library wherever and whenever was suitable for the interviewees. The duration of the interviews varied between 30 minutes to one and half hours and included 12 open-ended questions.

Interview themes were designated to probe interviewees' perception and opinion towards 'social diversity in their neighbourhood', their attitudes towards their current neighbours, their inclination towards informal and formal socialising at the neighbourhood level, their perception of new neighbours and inclination towards local street informal socialising events. Appendix B includes the interview themes.

C.3 Data analysis strategy and techniques

Prior to data analysis, it is considered that a vital step is to establish a general analytic strategy, defining priorities for what to analyse and why (Yin,

[16] (2070 questionnaires sent in total to three mentioned case studies)

[17] It is a qualitative method to investigate the concept of diversity and lived experience of interviewees. Therefore, number of interviews is not crucial as the quantitative part.

2003, p.109). An analytical strategy is derived from the theoretical propositions (Yin, 2003) and from those propositions can be determined the way the data is sorted, organised, conceptualised, refined, and interpreted (Thorne, 2000). As stated in the previous section, the data collection methods of this research include quantitative (questionnaires) and qualitative (interviews) methods. The first stage of data collection is based on the study's theoretical proposition, seeking residents' preferred dwelling types and further physical and socio-cultural characteristics of a *desired dense* neighbourhood. The data analysis strategy adopted for this stage was based on descriptive analysis which includes those techniques used to organize and summarize data for the purpose of enhancing the understanding of results (Tashakkori and Teddlie, 2010).

There are two approaches that can be used in the process of descriptive analysis: single-quantity-based statistics and exploratory-based statistics (Tashakkori and Teddlie, 2010). For the purpose of this research, exploratory-based statistics or *exploratory* data analysis (EDA) was adopted. It is seen as a critical first step in analysing data and is useful for checking assumptions and studying relationships among explanatory variables (Seltman, 2015). It includes a class of statistical techniques that involves sorting the raw data into groups where each group represents a measured unit, e.g., cases, observations, or variables (Tashakkori and Teddlie, 2010). The data can then be cross-classified either non-graphically or graphically using univariate or multivariate analysis to explore important characteristics of the data (Seltman, 2015). It is a kind of analytical manipulation technique, which assists in ordering and correlating the data (Miles and Huberman, 1994 cited in Yin, 2003).

Putting information into different arrays, making matrix of categories, creating data displays such as flowcharts and graphs etc. were some of the techniques used in analysing the data from the questionnaires (quantitative stage). Techniques were used to analyse preferred dwelling types, physical

and socio-cultural features of a *desired dense* neighbourhood against demographic characteristics of each case study.

For example, in investigating the desired physical attributes of redevelopment, preferred house or dwelling types for 'living in' and 'seeing in' the neighbourhood were correlated with demographic characteristics. The importance of housing characteristics such as noise insulation, number of floors, balcony, architectural style, front/back yard, communal facilities, opening to a view, storage space, secure parking, secure entrance, natural light and privacy were also ranked by the residents and analysed in each case study area and then compared to other case studies. For social components, a number of different aspects were investigated. For example, questions around having 'a diverse mix of people in the precinct' and 'increasing the chance of meeting more people in the area' were posed for responses. Other information such as age, family structure, income and the duration of living at the address were some of the other characteristics that respondents were requested to identify.

The second stage of data collection, the qualitative part, consisted of conducting interviews to investigate residents' opinions of what they considered to be the major undesired features of a dense neighbourhood. As a qualitative method, interviews have the capacity to broaden and enrich the research findings through imbedding respondent experience and their description and interpretation (Oishi, 2003). Qualitative research results are contextual, subjective, and a richly detailed data source (Byrne, 2001). For analysis, each interview was transcribed and thematic analysis was used to pare down transcripts to themes which shaped the interview format (Byrne, 2001). Interview themes and questions were formed after literature was reviewed around the issues identified in the questionnaire responses.

As the numbers of interviews in the study were low, it was decided to analyse the qualitative results aggregated. While numbers are very important in quantitative analysis, in qualitative analysis numbers are seldom considered

and it is the depth and meaning of the responses which are important (Oishi, 2003). In order to draw conclusions and interpret interview contents, thematic analysis used to categorise the responses in groups (Figure 10.1) and discourse analysis used for investigating meaning in a conversation (Potter & Wetherell, 1987; Shaw & Bailey, 2009), *reflecting the sense* of what has been mentioned (Fairclough, 2003, p.140). It was done by making the terms of speech (words) bold and meanings were interpreted by relevant literature in chapter ten.

Furthermore, Van Dijk (2016) views discourse analysis as a socio-cognitive approach, reflecting people's interpretation of a social environment, and as such it is a useful method in social psychology for understanding underlying layers of social practices, such as discrimination and exclusion. Willig (2015, p.165) also states that 'it provides us with a way of thinking about the role of discourse in the construction of social and psychological realities'.

C.4 Ethics

University ethics' process and guidelines were followed while conducting questionnaire and interview studies. Participation in each stage of data collection was voluntary. All data collection (questionnaires and interviews) were conducted by the author alone. Participants were not offered any incentives or gifts in any stages of data collection. The interviewees signed a consent form for participating and for the recording of each interview. The information gathered by the researcher was stored in a secure locked place at university and also electronically on a computer. Anonymity of all interviewees has been considered in writing the thesis or all other published or presented materials.

C.5 Bias

In this study the current perception of residents towards future dense development in their neighbourhood is assessed. It is acknowledged that such perceptions are not static and may change over time. During the data collection stages, the researcher chose strategies with low bias such as 'random sampling' in distributing questionnaires. Further statistical

calculations were also provided to validate the data in chapter nine (aggregated data) as the number of respondents in each case study was not high enough. Furthermore, in the qualitative stage, it is acknowledged the number of interviews was low. But it was assumed; the interviewees were more likely to be active in the community, be confident, articulate and may hold strong opinions. It is emphasised that individual opinions in both questionnaires and interviews do not necessarily reflect the opinions of the broader community. However, they give an insight into the underlying reasons that ignite, and to an extent circumscribe, community opposition to densification. The researcher attempts to avoid any pre-conception in interpreting results for the case studies. However, the nature of case study research requires a level of interpretation in order to develop an understanding of the issues that characterise a community.

Summary of chapter:

This chapter identifies the research approach adopted in this study, including the guiding theoretical perspective and its impact on the choice of data collection, methods, and techniques. Three TOD areas have been selected as case studies or ‘units of analysis’ due to the fact that residents living in these areas will be facing changes to their neighbourhood through the introduction of high-density targets in newly approved local structure plans. The next chapter will address the TOD context of this research, identifying the history of the concept and investigating ways in which it has been planned and implemented in various urban settings.

CHAPTER 5

Density in Transit Oriented Developments

Introduction:

This chapter discusses Transit Oriented Development as a sustainable policy initiated in many cities around the world in order to manage future urban growth, especially in those cities with major urban sprawl issues. It is a sustainable policy to address environmental, economic and social problems caused by urban sprawl. Residents living in areas close to major transit stations or routes are subject to profound changes in their neighbourhoods which include the introduction of high density developments. Therefore, community opposition to density is an obstacle in achieving TOD objectives in the areas. This chapter also reviews the density targets that are required for various TOD typologies and highlights TOD planning policy and designated density targets in Perth.

A. Principles of Transit Oriented Development

The case studies chosen in this research are TOD areas (neighbourhoods). What a TOD is will be explained, as will why current urban policies are moving towards developing density around transit nodes. The basic definition of TOD in all contexts is:

> …concentrating urban development around stations in order to support transit use, and developing transit systems to connect existing and planned concentrations of development (Bertolini et al, 2009, p.3)

In other words, centres and transit are core ingredients of TODs and a certain density (a minimum of 35 people and jobs/ha of urban land) is required to reduce the need for driving and make them viable developments (Newman, 2009, p.15). They:

> …concentrate a mix of moderately dense and pedestrian-friendly development around transit stations to promote transit riding, increased walk and bicycle travel, and other alternatives to the use of private cars (Cervero, 2009, p.23)

In major cities around the world, integration of transport and land use development are a priority agenda item for local governments (state and local councils) as it facilitates accessibility, and promotes a sustainable development; it has the potential to increase urbanity and human interaction in the public domain (Bertolini et al, 2009). TODs are following compact city policy in urban planning initiatives aiming to limit outward expansion of cities and urban sprawl in a sustainable liveable way (Woodcock et al, 2011), offering a preferable lifestyle for childless couples, young professionals and so-called 'empty-nesters' (Cervero, 2009). They also enrich lifestyle and business choices in our heterogeneous societies (Cervero, 2009). However, the major contrast between the compact city (built in or next to existing city) and TOD strategies (build within walking/cycling distance of a station) is that TODs occur around transit nodes (Figure, 5.1) (Bertolini et al, 2009).

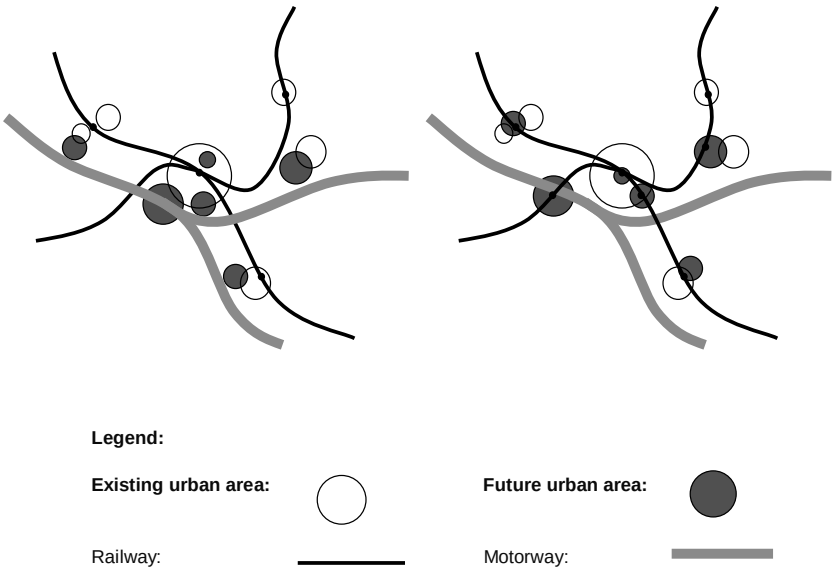


Figure 5.1 Left: Compact city policy: 'build in or next to existing city'; Right: Transit oriented development: 'build within walking/ cycling distance of station' (Bertolini et al, 2009, p.7)

In this way, station areas become nodes of lifestyle, business and consumption networks, temporary and permanent places of living, working and accessing entertainment in the city (Bertolini et al, 2009). The form of the 'transit city' has been developing since 1860 in Europe and the New World, spurred on by growth in population and industry, changing the traditional form of the 'walking city' (Figure, 5.2) (Kenworthy and Newman, 1999). Cities have been pushed outwards along transit corridors by faster travel options such as trains, trams and streetcars and have created mixed-use subcenters of medium density (Figure 5.3) (Kenworthy and Newman, 1999).

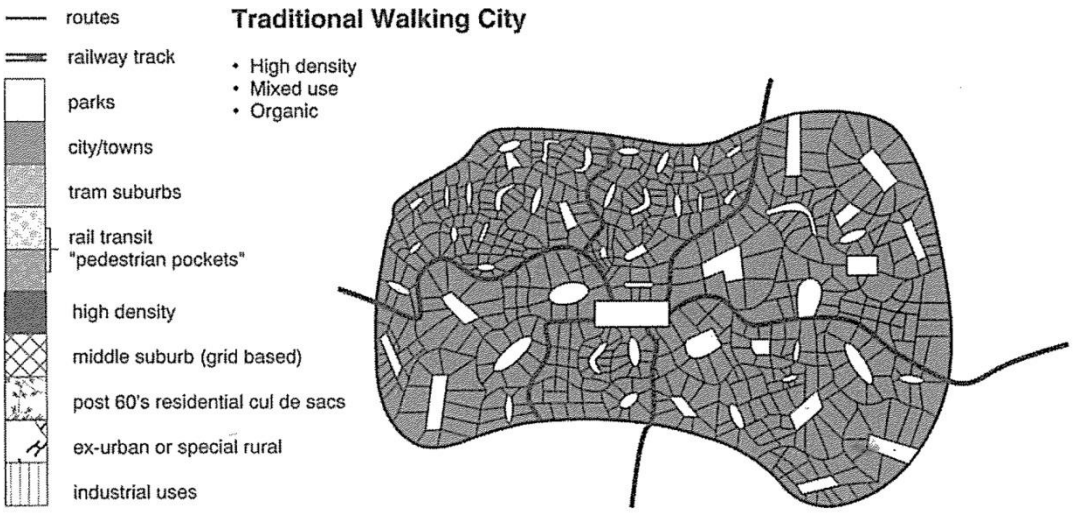


Figure 5.2 Traditional walking city (Kenworthy and Newman, 1999, p.28)

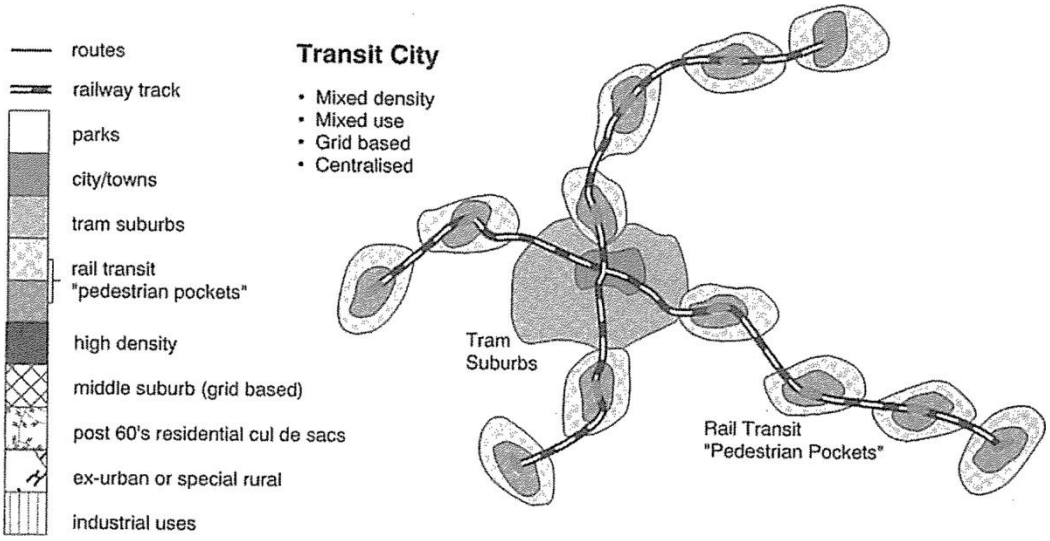


Figure 5.3 Transit city (Kenworthy and Newman, 1999, p.29)

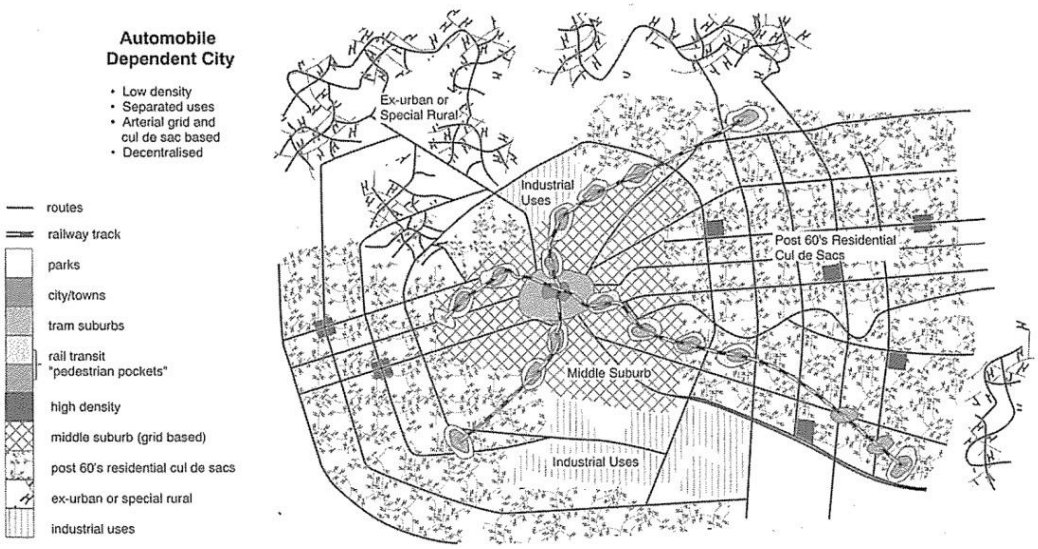


Figure 5.4 Auto city (Kenworthy and Newman, 1999, p.31)

But since WW II, the car has changed the transit city to the *auto* city by providing possible city growth in any direction (Figure 5.4) (Newman and Kenworth,1999).

However, since 1990s, there has been a return to the 'transit village' style of development as a sustainable city growth policy (Figure 5.5 and Figure 5.6) (Calthrope, 1993, Bernick and Cervero, 1997).

The transit village is defined as:

> a compact, mixed-use community centred around the transit station that, by design, invites residents, workers and shoppers to drive their cars less and ride mass transit more. The transit village extends roughly a quarter-mile [400 meters] from a transit station, a distance that can be covered in about five minutes by foot (Bernick and Cervero, 1997, p.5)

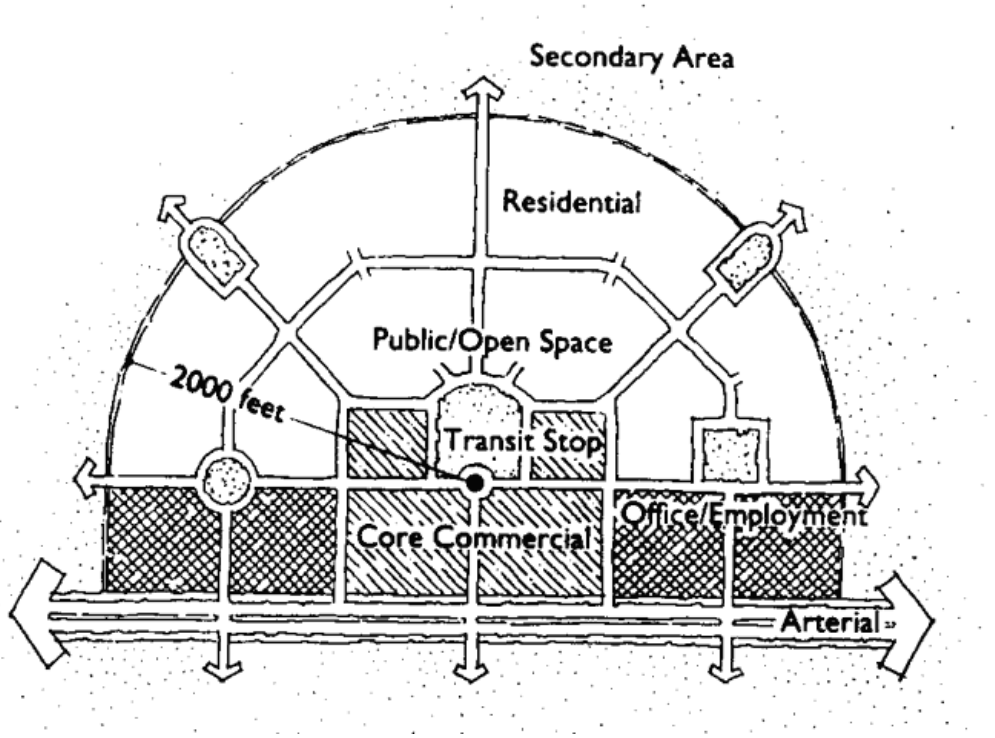


Figure 5.5: TOD general schematic plan, 2000ft=600 meters (Peter Calthrope ,1993, p.56)

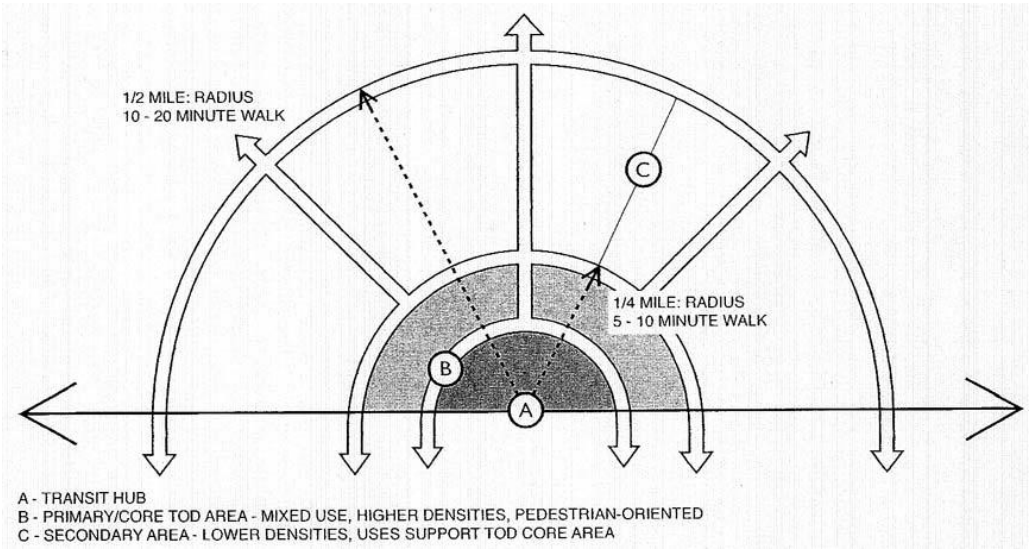


Figure 5.6: Walking circle and land-use zones (Hopper, 2007, p.122)

The urban village style has similar principles to new urbanism, and the smart growth movement which derives from the USA in the 1990s, promoting compact, less automobile-dependent, mixed use, walkable development with relatively self-contained communities (Burchell et. al, 2000; Grant, 2006). Such urban village style developments around transit nodes (TODs) can be of different scales and forms, ranging from regional plans to small infill projects, from urban sites to suburban new towns (Calthrope, 1993, p.117). They can appear in the form of new developments along new transit corridors around stations, or in the form of urban regeneration or urban revitalisation projects in established neighbourhoods, or on vacant or industrial sites close to an existing transit node.

Recently, there has been a push to install better transportation-related city management, proposing Mobility Oriented Development (MOD), as the next generation of TOD, Figure 5.7 (Smolnicki, 2017). The aim of the MOD is to enable people to walk, bike, or take transit for day-to-day shopping and work trips in a catchment area of more than 2000 feet (600 meters). The MOD catchment area is one-mile (1.6 km) from a neighbourhood's commercial centre, and aims to manage people's mobility behaviours with the use of existing infrastructure and by building-up new mixed-use structures with less physical and more organizational solutions (Crandall Arambula firm, 2018).

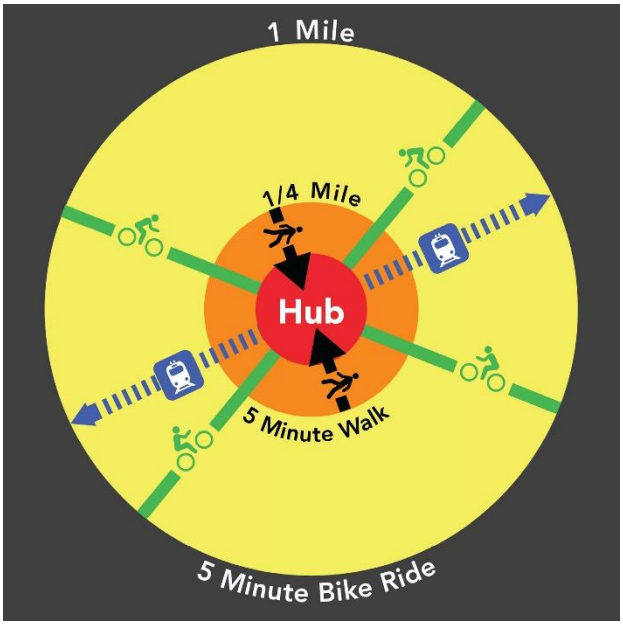


Figure 5.7: MOD diagram (Crandall Arambula firm: http://www.ca-city.com/approach/mod.html, accessed Feb 2018)

A.1 Adoption of TODs by the planning system

In the previous section, it was argued that over time, traditional walking cities transformed into auto-oriented cities as a way to decentralise cities. Decentralising cities was a way to take the pressure off the industrial cities and as a result the automobile has become the primary mobility choice (Belzer and Autler, 2002). However, the decentralisation policies have gone so far as to result in limiting mobility and transport options for many people. Further issues ensue from decentralisation, such as economic inefficiencies, health and safety issues, social inequalities (Belzer and Autler, 2002), uncontrolled urban sprawl, diminishing agriculture lands (Figure 5.9) (Brueckner, 2000) and an array of environmental, economic and social problems which are summarised in the following figure (5.8) by Kenworthy and Schiller (2017).

Environmental problems	Economic problems	Social problems
Oil vulnerability	Congestion costs	Loss of street life
Urban sprawl	High urban infrastructure costs for sewers, water mains, roads, etc.	Loss of community in neighbourhoods
Photochemical smog	Loss of productive rural land	Loss of public safety
Acid rain	Loss of urban land to pavement	Isolation in remote suburbs with few amenities
High greenhouse gases; global warming	Poor transit cost recovery	Access problems for those without cars or access to cars and those with disabilities
Greater storm water runoff problems	Economic and human costs of transportation accident trauma and death	Road rage
Traffic problems: noise, neighborhood services, visual intrusion, physical danger	High proportion of city wealth spent on passenger transportation	Anti-social behaviour due to boredom in car-dependent suburbs
Decimated transit systems	Public health costs from air and other pollution Health costs from growing obesity due to sedentary auto-lifestyles Physical and mental health problems related to lack of physical activity in isolated suburbs	Enforced car ownership for lower-income households

Figure 5.8: Problems associated with automobile dependence (source: Kenworthy and Schiller, 2017, p.19)

Figure 5.9: Perth's northern suburbs sprawl (source: https://thewest.com.au/news/australia/limit-urban-sprawl-says-freo-mayor-ng-ya-131536

Hence, TODs as part of the smart growth solutions have been adopted by planning systems in many cities around the world, such as Dallas, Denver, Portland[18], San Jose, San Diego[19], Singapore, Hong Kong, Tokyo, Bogotá, Curitiba, Bangkok, Jakarta, Kuala Lumpur, Sydney[20] and Melbourne[21] to address environmental, economic and social problems. TODs can reshape land use patterns at regional, local and neighbourhood scales (Bertolini et al., 2009). The aim is integration of land uses and developments in order to create a set of transport options alongside the automobile (Belzer and Autler, 2002). There are three dimensions in developing transit-oriented development (TOD) communities known as “the three D’s”, they are density, design, and diversity (land use mix). Each of the dimensions is needed to successfully build mixed-use communities (Cervero and Kockelman, 1997). TOD adoption by planning systems in the US has resulted in the creation of over 100 TODs and an additional 100 joint development projects (Figure 5.10) (Arrington, 2005). There are many similar projects in Australia (Newman, 2009; Curtis, 2009) (Figure 5.11 and 5.12), but the question is whether they have been successful in creating TOD communities.

[18] Portland, Oregon has the boldest TOD program in US. The 2040 Growth Management Strategy features a tight Urban Growth Boundary, focusing growth in transit centres and corridors and limit parking. Two-thirds of jobs and 40% of households are designated to be in centres and corridors served by buses and LRT (Arrington, 2005)

[19] San Diego Association of Governments (SANDAG) approved a ‘Regional Growth Management Strategy’ that calls for increased development in “transit focus areas (TFA) (Arrington, 2005)

[20] A Metropolis of Three Cities - The Greater Sydney Region Plan features a re-balance growth and deliver its benefits more equally and equitably to residents across Greater Sydney. It is to be prepared concurrently with Future Transport 2056 and the State Infrastructure Strategy, aligning land use, transport and infrastructure planning to reshape Greater Sydney as three unique but connected cities. (source: http://www.planning.nsw.gov.au/Plans-for-your-area/A-Metropolis-of-Three-Cities/A-Metropolis-of-Three-Cities)

[21] Plan Melbourne 2017-2050 is the integrating long-term land use, infrastructure and transport planning. It sets out the strategy for supporting jobs and growth, while building on Melbourne’s legacy of distinctiveness, liveability and sustainability (source: https://www.planning.vic.gov.au/policy-and-strategy/planning-for-melbourne)

Figure 5.10: Embarcadero LRT, San Francisco, CA (Source: Arrington, 2005, p.2)

Figure 5.11: Subi Centro in Perth, Western Australia (source: https://www.mra.wa.gov.au/projects-and-places/subi-centro/places-attractions

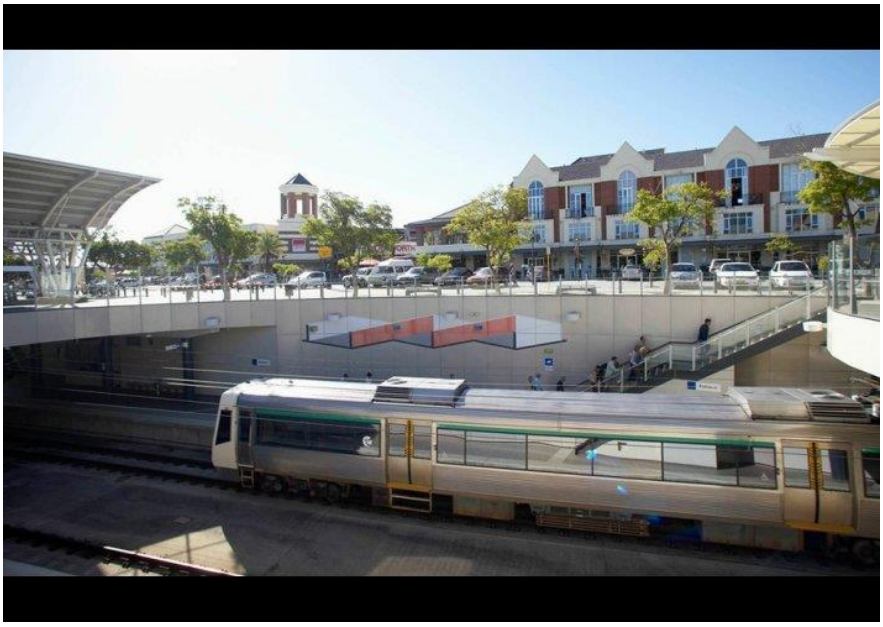


Figure 5.12: Subi Centre train station in Perth, Western Australia (source: https://www.mra.wa.gov.au/projects-and-places/subi-centro/places-attractions)

TOD benefits transit investment by bringing potential transit riders closer to transit facilities through moderate to high density developments (Arrington, 2005). Therefore, TOD development focuses on a compact site design, oriented for the pedestrian by high density residential and high intensity uses (Arrington, 2005). Cervero and Kockelman (1997) also emphasize density as the key criterion of a successful TOD community. Hence, a TOD development that lacks compact affordable dense housing, would have limited benefits. This was the case in the TOD development in Subiaco, Perth

(Figure 5.11 and 5.12) where most of the redevelopments are low-density, automobile dependent and not affordable (Renne, 2005).

Planning and implementation of TODs is similar to many other planning projects in that they require the involvement of many public and private stakeholders, including existing residents. However, few communities embrace density as a way to make a TOD successful (Arrington, 2005), as it demands changes to people's places (hometowns and neighbourhoods) which usually arouse great passions and substantial opposition (Rice, 2009). It is a major challenge for achieving a successful TOD community, which will be discussed in the next section.

B. Community opposition: A challenge for TOD implementation

Among the challenges facing TODs, such as improving efficiency in terms of speed and flexibility of the transportation system and its governance, gaining community support for increasing residential and commercial *density* is undoubtedly the major one (Cervero et al., 2004; Bertolini et al, 2009; Rice, 2009; Woodcock et al, 2011, Newman, 2017). Depending on the nature of the TOD and its location, various stakeholders are involved, such as residents, business owners, schools, minority groups, youth and senior groups and government agencies. Often TOD proposals become the focus of local community resistance as they see their interests affected or threatened by proposed development outcomes (Rice, 2008).

In an Australian context, the spectrum of community concern varies. It may be related to concerns about land use changes, movement networks such as road design, speed limit, number of parking bays, traffic, noise, privacy, dislike/fear of change (Ainsworth, 2005). It may be that the impact on amenities, loss of heritage, and loss of natural environments are among the concerns. There might be scepticism of public transport systems due to psychological attachment to the low density and high car use lifestyle, a

psychological and cultural attachment to cars, a belief that high status equals a car (Ainsworth, 2005; Rice, 2009). There may be some cynicism that creating a TOD is merely about developers making a lot of money at their community's expense (DOT, 1996; Ainsworth, 2005; Rice, 2009). Concerns also include issues in regard to urban form such as building heights and dwelling types which are labelled as being 'out of character' (Dovey and Woodcock, 2010). Rice (2009, p.177) states having a big house on a big block aspires people and gives them the feeling that they live in high quality desirable neighbourhood.

Rice (2009) argues that TOD resisters feel strongly about keeping the status quo of place and people, a way to protect their home from challenging impacts such as new and different people, or living closer together than is desirable. They desire to control interactions with other people rather than enjoying spontaneous interactions with the whole diversity of society (Rice, 2009). Scepticism to social heterogeneity was also highlighted by Davison et al., (2016) in his study of factors that escalate community opposition to affordable housing development.

TODs, in a similar way to other dense/infill developments[22], encourage a high density lifestyle which will change the character of current low density cities and cultural change for those living in such dense areas is required for their success (Troy, 1996; McManus, 1998; Lewis, 1999; Bunker et al., 2002; Searle, 2003, 2007; Randolph et al., 2005; Randolph, 2006; Woodcock et al, 2011; Nematollahi et al, 2015, Newman, 2017). Not only the community, but even some researchers are cautious about promoting a rapid increase of density through urban policies such as TOD (Hitchcock, 1994; Goodchild, 1994; Orchard, 1995; Randolph, 2006; Gibbs and Krueger, 2007; Moroni, 2016). They argue that increasing residential density without considering not only the need for change in current lifestyle and culture, but also other land

[22] In addition, tackling housing affordability by only increasing density (compact city model), is not a valid argument (Van Den Nouwelant et al., 2014). For instance, new high density centres are being built for childless groups (Randolph, 2005) such as apartments in Parramatta in Sydney. However, rapid price growth in the inner city has driven many buyers to Parramatta and nearby areas that offer more affordable housing (Johnstone, 2014) including families with kids to live in apartments, which do not address their needs such as community rooms, outdoor playground and etc. (Fuerst and Petty, 1991; Yates, 1995; Easthope and Judd, 2010).

uses such as those which serve the residential areas, providing services and amenities, may result in undesirable consequences.[23]

Further, in the Australian context, Easthope and Judd (2010) question whether higher density living is a desirable lifestyle for Australians. They argue that *neighbourliness*, the maintaining of good relationships with neighbours, is influenced by the mix of the residents living in close proximity (apartments), construction and design quality, such as having adequate privacy, low level of noise, and the management of the complex. While density is a key ingredient to make a TOD work efficiently as an urban policy, it is the culture of residents and their relationships which play an important role in the creation of desirability and satisfaction with a TOD when it is implemented.

This uncertainty about TOD outcomes may cause community concerns. However, in order to overcome the concerns and gain community support for implementing dense TODs, community education and intensive community engagement are initial first steps (Rice, 2009). Genuine negotiation and understanding that the change is affecting people, their homes and lives, and their right to voice their concerns are suggested by Rice (2009) as ways to first build trust with community, then later gain their support for TODs. Even achieving consensus during the planning decision process for a moderate development would be a great success, rather than causing resentment and cynicism in order to achieve a greater density outcome (Rice, 2009).

> Instead of labelling all people who don't agree as troublemakers who need to be beaten; engage, understand, discuss and negotiate. Not everyone is likely to agree in the end, but if you have the majority support the consultation will have built a good platform for further development in the future (Rice, 2009; p.183)

[23] While Cox's (1999) anti-densification ideas were loud in defending the American dream and people's freedom to choose where they like to live and work, Gordon and Richardson (1997) challenged compact city principles such as high density preferences, saving agriculture lands, reducing congestion, saving energy and promoting transit in the US context. Further Moroni (2016) argues, density is just a tool to achieve a broader objective in urban planning, not an end in itself.

C. Density targets in TODs

The complex nature of density and the cultural context in which it is planned and implemented makes it challenging for planners to propose a fixed target density number. However, some planners have accepted the challenge and have set a target density for future TODs.

Calthrope (1993, p.58, Figure 5.13) sets an average net density of 18 dwelling per acre or 45 dwellings units per hectare for TODs.

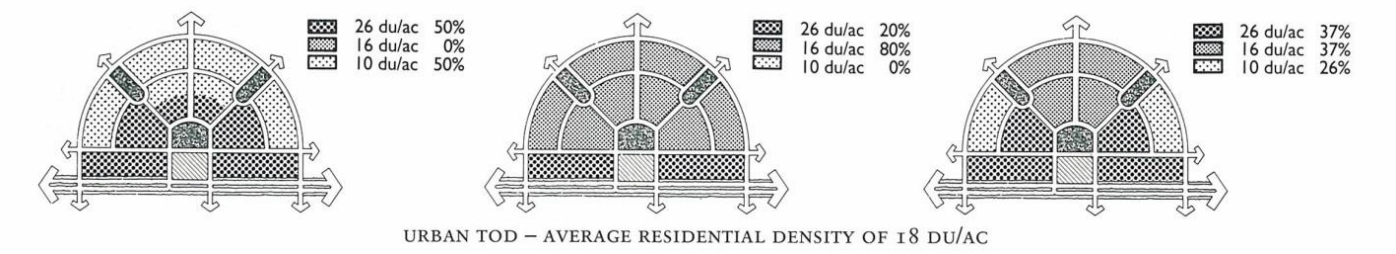


Figure 5.13: Range of residential density in TOD area, 65 dwellings per hectare to 25 dwelling per hectare.

Further Dittmar and Poticha (2004) proposed a general TOD typology, identifying minimum density and dwelling type requirements for each TOD (Figure 5.14). To adjust the table to a current Australian context, a similar TOD typology table was produced by the author according to Australian residential code measurements (dwelling per hectare), Australian dwelling types and transport modes.

The table depicts the density target in relation to Australian dwelling types and highlights that any density target greater than R 49 (49 dwelling per hectare) may be of the apartment style of development. Apartment living is very different to other dwelling types in terms of built form, living style (more shared areas) and management. Hence, they are likely to face community concerns other than TOD typologies with less density targets. The next section reviews TOD policy in Perth and in particular density targets for different activity centres.

TOD Type	Transit Mode	Minimum Housing Density (dwellings/hectare)	Housing Types (changed according to Australian housing types)
Urban Downtown	All Modes	> 148 dwellings per hectare	Apartments Townhouses/row houses Grouped dwellings
Suburban Centre	Train Tram Rapid bus Local bus	> 123 dwellings per hectare	Apartments Townhouses/row houses Grouped dwellings
Urban Neighbourhood	Light rail Tram Rapid bus Local bus	> 49 dwellings per hectare	Apartments Townhouses/row houses Grouped dwellings Single Family
Suburban Neighbourhood	Light rail Rapid bus Local bus	>29 dwellings per hectare	Townhouses/row houses Grouped dwellings Single family
Commuter Town Centre	Tram Rapid bus Local bus	>29 dwellings per hectare	Townhouses/row houses Grouped dwellings Single family
Neighbourhood Transit Zone	Local bus	>17 dwellings per hectare	Townhouses/row houses Grouped dwellings Single family

Figure 5.14: TOD Typology (reproduced by author based on Australian R code unit (dwellings per hectare), dwelling types and existing transit modes in Australia). Primary source: Dittmar, H. and S. Poticha. 2004, p.38)

D. TOD in Perth

Western Australia's history of metropolitan planning starts with the Stephenson-Hepburn plan in 1955, followed by the Corridor Plan in 1970, Metropolitan in 1990 and then Network City in 2004 (Curtis, 2009). While the intention of the 1955 plan, the corridor plan in 1970 and Metropolitan in 1990 were land use and transport integration, they eventuated in a series of self-contained employment and residential communities in close proximity to the city centre (the 1955 plan) with regional corridors and centres at the periphery (1970, 1990) (Curtis, 2009).

As a result, Perth today is a low density suburban city region along the Indian Ocean coastline (130 km) (Curtis, 2009) with a predicted population of 2.30 million by the end of June 2018 (Population Australia, 2018). The latest planning strategy for metropolitan Perth, Network City (25 year planning strategy), is different to earlier plans; it focuses on a connected network of activity centres in current built-up areas, addressing community demand for public transport (Curtis, 2009, p.43).

The Network City plan comprises three elements (Curtis, 2009, p. 43):

- Activity corridors: centred on a main arterial road or railway line with catchment area of 400m on either side.
- Activity centres: are developed at intervals along the activity corridor with a concentration of small scale employment, services and medium to high density housing within walking distance of the transit node.
- Transport corridors: are paired with one or more activity corridors as a fast-moving route for inter-urban travel.

Network City planning policy aimed to integrate land use and transit in one of the most important public transport investments in the last decade in Perth Metropolitan Area. The investment involved the building of a 72-km railway line to serve Perth's southern suburbs (operational from December 2007) which travels in part along the central median strip of a freeway and in part along its own dedicated reserve (Figure 5.15) (Curtis, 2008)[24].

[24] It was a challenging practice to design a transport system to compete with the car (Curtis, 2008, p.286).

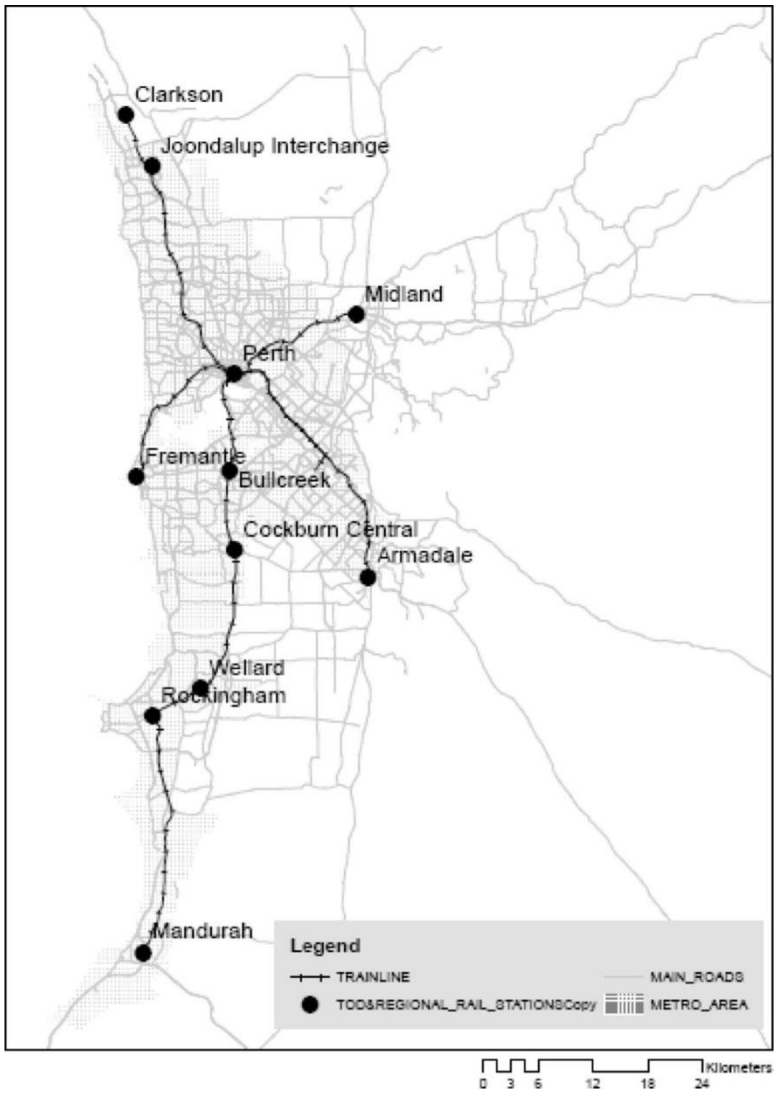


Figure 5.15: Greater Perth Metropolitan Area (source, Curtis, 2008, p.286)

The first 33 km of its 72 km length, was placed within the central reservation of the freeway, similar to the northern suburbs' model of transit. The transit interchange model, promoted by railway planners rather than spatial or land use planners (Curtis, 2008), resulted in the integration of feeder bus and rail, and the provision of large park-and-ride sites around these stations rather than the integration of denser areas within walking catchment of stations (Curtis, 2008, p.290).

TOD models based on the integration of car and bus with train stations rather than integration of land uses with train stations, limit the commitment to land use development (Dittmar & Ohland, 2004; Rodriguez & Targa, 2004) and

therefore limit the ability of people to access areas of mixed land use and its activities, in one trip (Curtis, 2008). Curtis (2008, p.298) criticises the railway planners' approach of creating transit interchanges that result in isolated transport hubs and low residential density areas beyond walking distance of railway stations.

Canning Bridge is the transit interchange TOD type (Figure, 5.16). Cannington, the other case study is similar to Murdoch and Cockburn TOD type (Figure 5.13). It is a hybrid TOD, as it has a district shopping centre, a secondary college and Department of Community Development within its catchment area. Wellard is a TOD of the type based on walking, rather than transit interchange.

Station	TOD type (current)	Predominant land use	Transit arrangements	Parking provision	Proximity to existing centre
Perth (William Street)	CBD	CBD	New underground station linked to existing Perth station via walkway	0	Within
Esplanade	CBD	CBD and adjacent to river park, Perth convention centre	Adjacent to second CBD bus port	0	Within
Canning Bridge	Transit interchange	Station in 100-metre freeway reserve; surrounded by low-density suburbs	Bus interchange above station	0	Small shopping strip 0.7 km
Bull Creek	Transit interchange	Station in 100-metre freeway reserve	Bus interchange; park and ride	714	n/a
Murdoch,	Transit interchange [TOD hybrid];	Station in 100-metre freeway reserve; adjacent to low-density suburbs and tertiary university; proposal for new hospital and higher density residential	Bus interchange; park and ride	1118	Neighbourhood shopping centre 0.8 km
Cockburn	TOD hybrid; transit interchange	Station in 100-metre freeway reserve; adjacent to low-density suburbs; big box shopping centre; redevelopment authority TOD site—residential and town centre uses	Bus interchange; park and ride	628	District shopping centre 0.6 km
Kwinana	Transit interchange	Railway in own reserve; Freeway and major urban arterial	Bus interchange; park and ride	418	District shopping centre 3 km
Wellard	TOD–walk on patronage	Railway in own reserve; Residential; Main street planned	Park and ride	298	Adjacent neighbourhood centre (proposed)

Figure 5.16: Perth-Mandurah railway, status of TOD in new station precincts (Curtis, 2008, p.296)

After implementation of the Network City planning policy, Directions 2031 Spatial Framework was published as an attempt to adapt isolated railway stations to the concept of an integrated activity centre, creating a significant challenge to planners. The Directions 2031 Spatial Framework for Perth and Peel was released for public comment in June 2009 and published by the Western Australian Planning Commission and endorsed by the minister in August 2010 (Directions 2031, 2010). It is a strategy to deliver Transit Oriented Developments as a solution to cope with expected future housing demand and population growth, mainly by increasing density around train stations.

In addition, the WA Planning Commission published state planning Policy 4.2, identifying Activity Centres for Perth and Peel Regions (Figure 5.17). In the document, the Activity Centres hierarchy was categorised into seven groups:

1. Capital city (such as Perth CBD, East Perth, West Perth and Northbridge)
2. Strategic metropolitan centres (such as **Cannington**, Joondalup)
3. Secondary centres (such as Subiaco, Cockburn)
4. District centres (such as **Canning Bridge**, West Leederville)
5. Specialised centres (such as Curtin/Bentley, Perth airport)
6. Neighbourhood Centres (such as **Wellard**)
7. Local centres (any centre with a shop-retail floor space under 1500 m2)

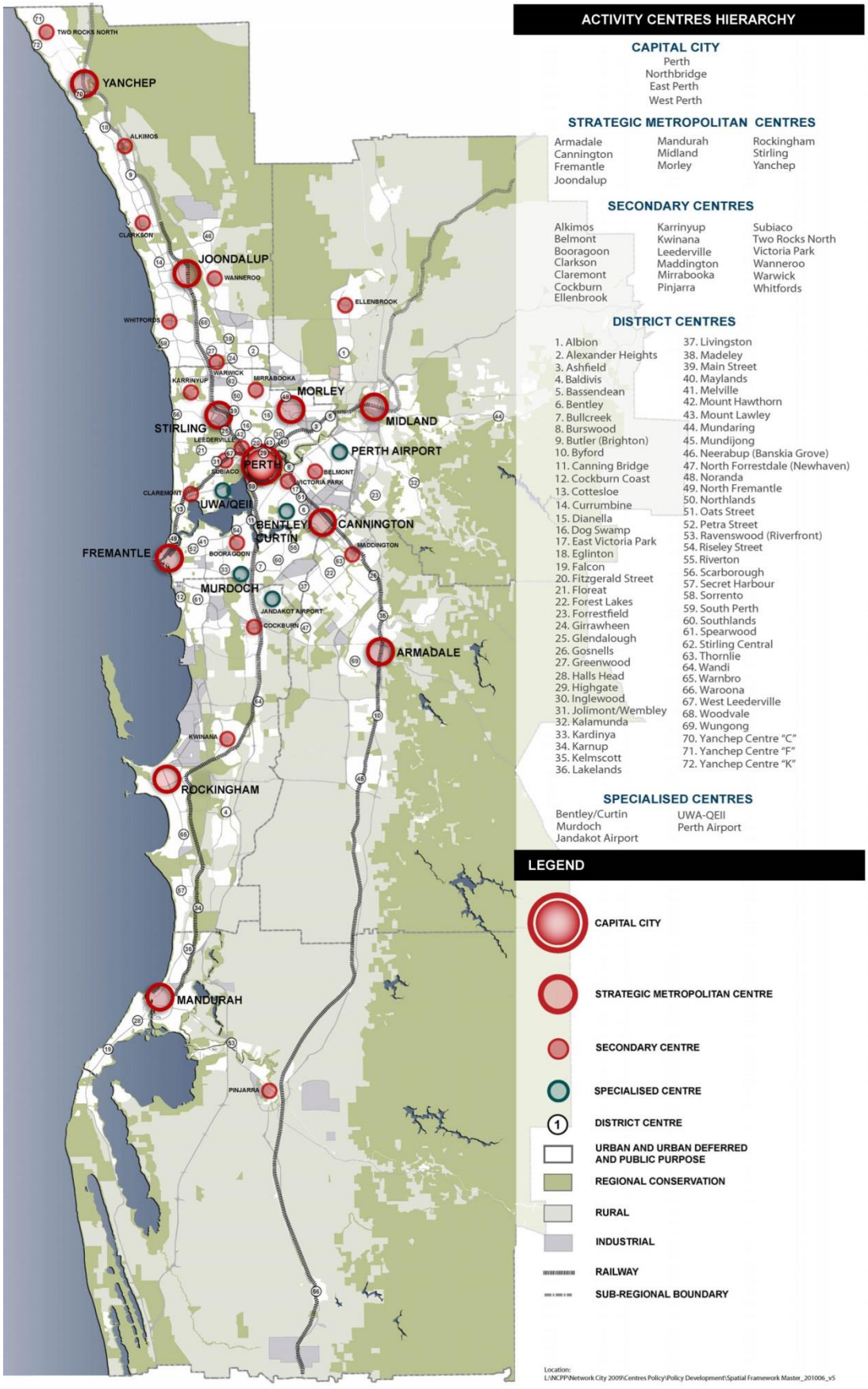


Figure 5.17: Activity Centres Hierarchy (Government Gazette, 2010)

Further, Activity Centre characteristics were outlined in the following table (Figure 5.18) from the WA Planning Commission Gazette, indicating minimum gross residential density and gross desirable density for each

TABLE 3: ACTIVITY CENTRE FUNCTIONS, TYPICAL CHARACTERISTICS AND PERFORMANCE TARGETS

Typical characteristics	Perth Capital City	Strategic metropolitan centres		Secondary centres		District centres		Neighbourhood centres	
Future indicative service population (trade) area[4]	Greater metropolitan region	150,000–300,000 persons		Up to 150,000 persons		20,000–50,000 persons		2000–15,000 persons (about 1 km radius)	
Walkable Catchment for residential density target	N/A	800m		400m		400m		200m	
Residential density target per *gross hectare*[5]	N/A	Minimum	Desirable	Minimum	Desirable	Minimum	Desirable	Minimum	Desirable
		30	45	25	35	20	30	15	25

Table 3: Diversity performance target - *mix of land uses* [6]

	Centre size - *Shop-retail* floor space component	*Mix of land uses* floorspace as a proportion of the centre's total floor space[7]
Perth Capital City		N/A
Strategic metropolitan centres, secondary and district centres	above 100 000m2	50 %
	above 50 000m2	40 %
	above 20 000m2	30 %
	above 10 000m2	20 %
	less than 10 000m2	N/A
Neighbourhood centres		N/A

[4] Service population or retail trade areas for (residential-associated) centres are indicative only and often overlap.
[5] Typically, the average R Code (or net density) equivalent is two to three times the number of dwellings per *gross hectare*.
[6] "*Mix of land uses*" includes office, civic, business, health, community, entertainment cultural uses and showrooms: see definition in **Appendix 1**.
[7] Total shop-retail and *mix of land uses* floor space.

hierarchy.

Figure 5.18: Activity Centres population density and gross density targets (Government Gazette, 2010)

The author has calculated the required net residential density range (density target, R code) for four activity centre categories based on document in Figure 5.18:

- Strategic metropolitan centres: R 90 to R 135
- Secondary centres: R 75 to R 105
- District centres: R 60 to R 90
- Neighbourhood centres: R 45 to R 75

Based on Alexander's (1993) density analysis, density targets of four Activity Centre categories in Perth can be achieved through medium residential density housing rather than high density (apartments). Alexander et. al. (1988) tested the relationship between densities and dwelling types. He explored the relationship between different density measures and other variables such as site coverage and floor area ratio. Ninety-nine abstract site layouts for four dwelling types were designed. These four were single family detached housing, row or terrace housing; low-rise garden apartments; and high-rise apartments. Alexander (1993) suggested row housing and low-rise garden apartments share the middle densities, with maximum R145 and R111 respectively.

Therefore, it is evident that for most Activity Centres in Perth metropolitan area the designated densities within catchment areas can be achieved without any strong push for high-rise apartments, which has the potential for causing strong community opposition. However, the land availability issue usually results in proposals for high-rise dwellings in order to achieve greater density, which may be in conflict with community preference, creating a decision making process environment that has the potential for community opposition. Usually projects with an intense increase in density-heights create community opposition (Churchman, 1999; Ainsworth, 2005). This issue is most relevant in areas where TODs proposals include high density to

be viable. There are studies that show that apartments (more than 4 storeys) are not popular and people are in favour of medium-rise density in the Perth context (DOP, 2013).

Summary of the chapter:

It is concluded that increasing density is a key element in achieving TOD objectives (especially high density), a plan usually undermined by community opposition. Various reasons were given as causes of the opposition, including the reasons concerning the physical quality of a development such as privacy and noise, to social qualities such as the social diversity of new residents. Further, it was argued that gaining community support for TOD implementation needs community education, extensive and genuine community engagement.

TOD typologies in relation to dwelling types were used to indicate that density targets greater than R45 encourage high density (apartment style) developments that are usually not preferred by the community and are likely to be resisted. Therefore, the following case study chapters investigate community preference in regard to physical qualities of built form and social qualities of a dense neighbourhood in order to further understand the causes of opposition.

CHAPTER 6

Canning Bridge: an inner-ring, affluent TOD

This chapter and the following two chapters (chapter 7 and chapter 8) study community preference in regard to dense neighbourhoods to understand underlying layers of community opposition. These chapters present the outcomes of questionnaire surveys in the three case studies, reflecting a proportion of residents' opinion living in the catchment area of a train station.

As stated in the chapter on methodology, the three factors used in selecting case studies were: distance from the CBD, demographic characteristics and density targets. In addition to those factors. in the course of this study, the opposition of the Canning Bridge community to the proposed Canning Bridge activity centre plan, and to any high density project attracted much media attention.

Since 2009[25] this community opposition created a long and difficult path for council and developers in the planning approval process for the precinct. This situation has made this area suitable for the research to investigate the possible underlying layers of opposition causing resistance in an affluent area.

Introduction:

This case study is located close to the CBD (Figures 6.1 and 6.2). The station catchment area was designated as an activity centre in the State Planning Policy to encourage infill developments for future housing demands. However, strong community resistance slowed down the planning process. The first section of this chapter provides a description of the study area and its geographical characteristics, the second section discusses the area's urban planning background. The third section discusses the case study questionnaire outcomes in order to unveil likely reasons for community opposition. Results also present the community preference for the future dense living environment. The last section concludes with the major findings.

25) The media articles reflecting the community opposition to Canning Bridge dense developments:

a) September 5th, 2017; *Changes to Canning Bridge Activity Centre Plan don't do enough to protect residents, say Applecross and Mt Pleasant homeowners*, written by Josh Zimmerman, URL: https://www.communitynews.com.au/melville-times/news/changes-to-canning-bridge-activity-centre-plan-dont-do-enough-to-protect-residents-say-applecross-and-mt-pleasant-homeowners/

b) May 9th, 2017; *City of Melville to review Canning Bridge Activity Centre Plan,* written by Josh Zimmerman, URL: https://www.communitynews.com.au/melville-times/news/city-of-melville-to-review-canning-bridge-activity-centre-plan/

c) June 21 2016; *Unlimited building height plan for Canning Bridge shocks residents*, written by Emma Young, URL: http://www.watoday.com.au/wa-news/unlimited-building-height-plan-for-canning-bridge-shocks-residents-20160620-gpn92n.html

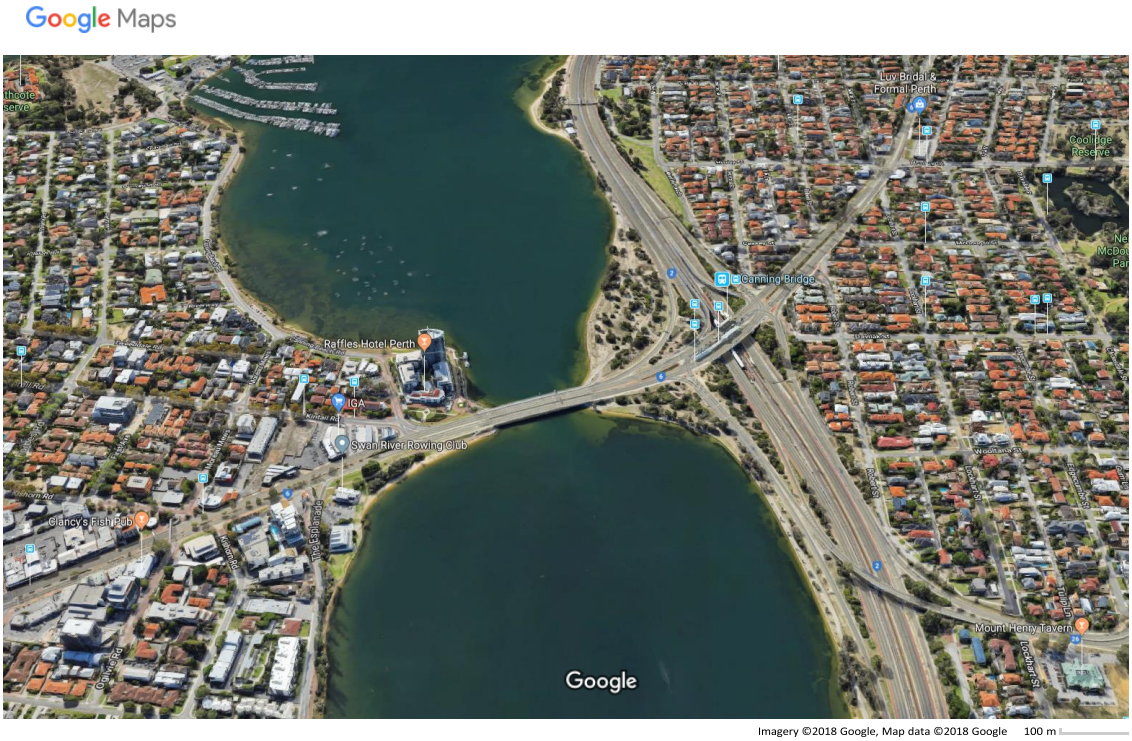


Figure 6.1: Canning Bridge train station and its surroundings arial view from south to north (source: google map, 2018)

Figure 6.2: Canning Bridge Station view from the bus stop located on the bridge (Source: https://foursquare.com/v/canning-bridge-station/4d7742ed8963f04dd18fe937?openPhotoId=56124c0f498eebb5946792e8, image taken in 2015)

A. Background to the study area

Since December 2007, Canning Bridge Station has been operational on the southern train line (Mandurah line). The station is located inside the median strip of the Kwinana Freeway, resulting in poor walking and bike riding accessibility to the station. There is no immediate car park available for passengers. Accessibility to the station is mainly provided by bus services.

As mentioned in Chapter Four, the Canning Bridge TOD model is similar to the northern suburbs model of transit, transit interchange model, integration of rail and buses rather than rail and land uses (Figure 4.13). The catchment area which is 800 meters from the train station (10-minute walking distance) consists of two districts, Como and Salter Point areas under City of South Perth Council and Applecross and Mt Pleasant areas under City of Melville Council. The Swan River separates the two districts as Figure 6.3 shows.

Figure 6.3 Canning Bridge activity centre location in local government areas, the green circle. (background map source: GHD Urban Growth Analysis document, 2009, p.6)

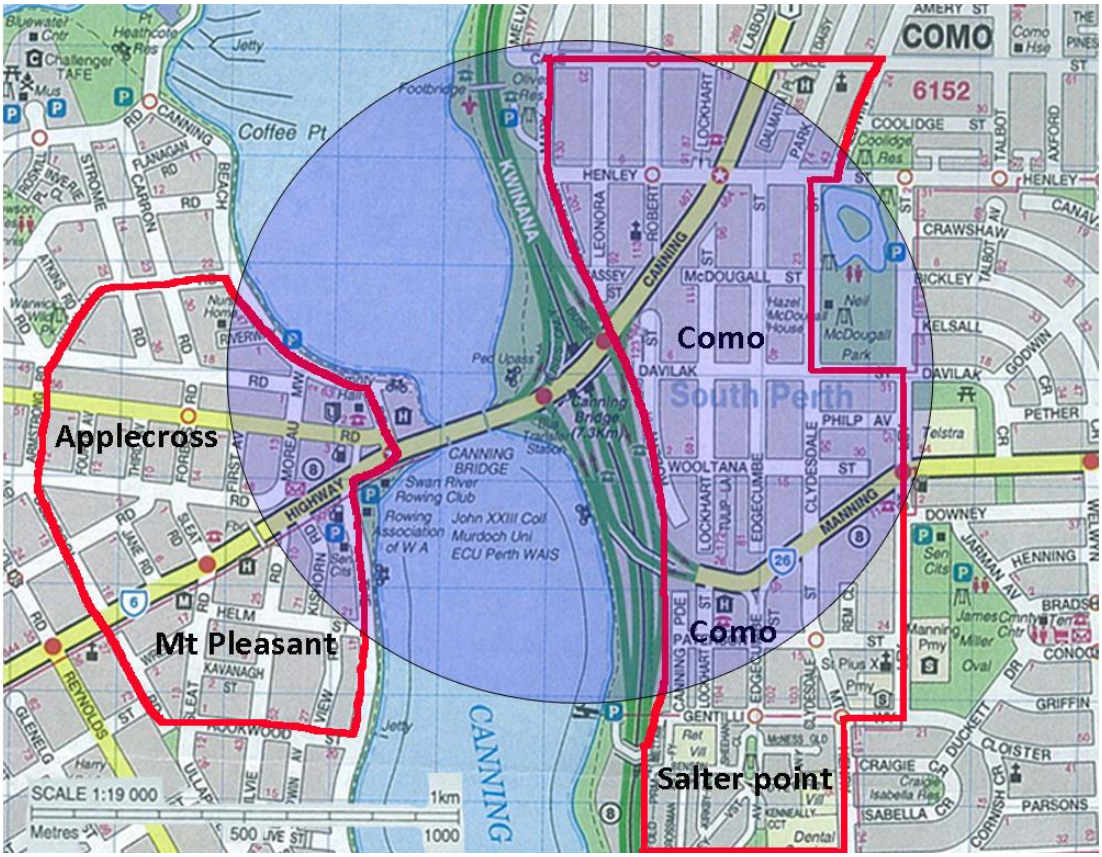


Figure 6.4 Canning Bridge activity centre map. Purple circle indicates 800 meters; however, the red line presents the extent of data collection boundary for the research. (Prepared by the author)

It is evident in Figure 6.4 that the walkable catchment (purple circle) is limited, particularly on the West side of station (Mt Pleasant and Applecross areas) as river and freeway occupy most of the landscape, while on the East side of the station, Como area has the largest catchment. Therefore, in order to gather more data, the study area boundary was extended on both sides as marked with red lines on the map, where the distance from the station is between 800 meters to 1km, similar to the government precinct height proposal map in 2011 (Figure 6.20). The catchment area includes parts of Applecross, Mt Pleasant, Como and Salter Point precincts.

The following map shows the northern section of Canning Bridge Station catchment area (Figure 6.5). Further images have been included to show existing new and old dwelling types in the case study area. The area is mainly dominated by single or double story detached houses and then by medium density housing such as grouped dwelling or town houses.

Figure 6.5 (top): North section of Canning Bridge catchment area (source: google map, 2018)

Figure 6.6: On the left, single storey detached home on the right and 3 storey detached home on the left in Mount Pleasant (taken by the author, 2012)

Figure 6.7: New multi-unit development (4 storey) on the left and single storey detached home on the right in Mount Pleasant (taken by the author, 2012)

Figure 6.8: New multi-unit 8 storey development Mount Pleasant (taken by the author, 2012)

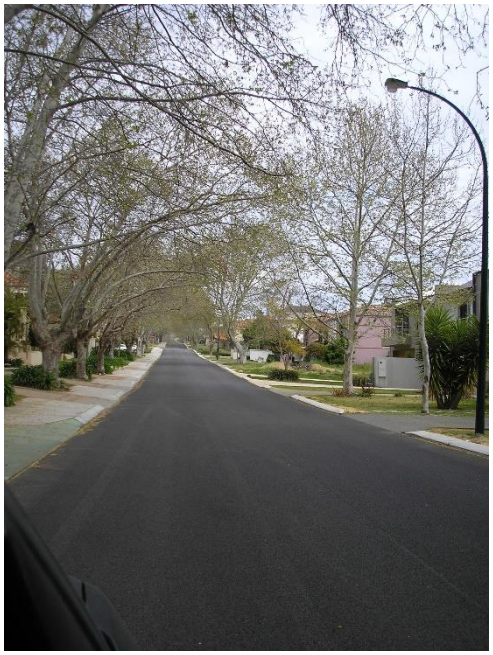


Figure 6.9 (left): Applecross, dominantly 2 storey detached houses, one of the leafy streets (taken by the author, 2012)

Figure 6.10 (right): Applecross, 4 storey multi-unit development on the right and 2- storey dwelling on the left (taken by the author, 2012)

Figure 6.11: A double storey dwelling type (river view) in Applecross (taken by the author, 2012)

Figure 6.12: Raffles multi storey development in Applecross (taken by the author, 2012)

Figure 6.13: six-storey apartment in Applecross (google image, 2015)

Figure 6.14: eight-storey apartment in Mount Pleasant (google image, 2015)

Figure 6.15 (left): Grouped dwelling Como area (taken by the author, 2012)

Figure 6.16 (right): Compact detached dwelling in Como (taken by the author, 2012)

Figure 6.17 (left): Double storey detached dwelling, Como. (taken by the author, 2012)

Figure 6.18 (right): Single storey detached dwelling in Como. (taken by the author, 2012)

B. Planning proposals for Canning Bridge TOD development

As stated in Chapter Four, Directions 2031 Spatial Framework for Perth and Peel was published by the Western Australian Planning Commission and endorsed by the Planning Minister in 2010. Its purpose is to address future planning objectives such as identifying areas as activity centres which need to be densified.

Canning Bridge is one of those activity centres referred to in the Directions 2031 document. The station has been assigned as a 'district centre' in *Directions 2031* (WAPC, 2010) with an associated target housing density of R 90 (90 dwellings per hectare) as stated earlier in Chapter Four. The planning proposal for the precinct faced strong community opposition and was only approved by the Minister for Planning in February 2017, after six years of amendments.

Initial community consultation for the Canning Bridge activity centre, commenced in 2006. Estill and Associates consultants (after Network City plan in 2004), conducted preliminary community consultation under the Dialogue with the City of Melville program, Melville Visions agenda. Their reports gave recommendations for built forms, future TOD developments in

Melville City, and for accessibility and inclusion of natural environments. In addition, the reports indicated that Canning Bridge TOD high density proposal was less supported than another high density TOD proposal located further South of Perth such as Murdoch TOD (Estill and associates, 2006). The consultants (Estill and Associates, 2006, 2007) stated that residents' opinions in regard to developments for the Canning Bridge area, were more in line with moderate dense developments such as in Subiaco. Subiaco is an affluent area, in close proximity to Perth CBD, and developments in the area had a moderate increase in height (4 to 5 storeys) (Figure 6.19).

Figure 6.19: Residential building in Subiaco (source: http://www.hamessharley.com.au/project/subiaco-square)

In contrast to the community consultation report, the Canning Bridge activity centre proposal (Figure 6.20) proposed heights ranging from 5 to 20 storeys in Mt Pleasant and Applecross areas (West side of the river) and in Como, on the East side of the river, from 3 to 10 storeys.

Figure 6.20: Canning Bridge Vision Building Heights map (2011, map legend was rescaled by author to be readable)

Participants' comments regarding the building height map were mentioned in the consultation report (GHD, 2009, p.24, p.47 and p.50). Residents preferred the 'maximum height to be limited to 4-5 storeys' and '5-6 storeys', a precinct design which does not follow the 'Gold Coast design', a gradual increase in height 'from one boundary line to another (e.g. Not from 10 storey to single storey)' and a reduction in the intensity of 'density'. Participants' uncertainty about future occupants of high-rise developments was also mentioned in the report, associating them with 'vertical communities' which may 'become gated communities or slums' and with a 'greater influx of younger people' (GHD, 2009, p.47 and p.48).

The sharp mismatch between proposed building height map and residents' preferred density type resulted in generating community resistance[26] and an

[26] In August 2011, mayor James Best said: 'Over a series of six successive community meetings, the general opinion of those in attendance moved from resistance to acceptance as residents were able to see that this was a long term plan - a fifty-year vision – and that change was not going to be forced upon anyone overnight.' (www.committeeforperth.com.au/assets/documents/newsletters/insightAugust2011.pdf)

uneasy community engagement process which delayed the final plan by few years[27]. It also damaged the legitimacy of the community engagement process. During an in-depth interview by the author in August 2014 with a prominent member of the group opposing high density in the Canning Bridge area, the proposed intensity of density was criticised:

> They don't live here and I know that we can be accused of NIMBY but that's not it, all of the people who are in my group [opposing the high rise developments] appreciate that if some divisions were not allowed we wouldn't live here because we live on subdivided blocks. All of us, I think realized there need to be more density, it's not a problem but it is the way you go about that density.

The latest Canning Bridge Activity Centre (Final Plan) (Figure 6.21) was released in February 2016[28] (City of South Perth), and was approved by the minister in February 2017.

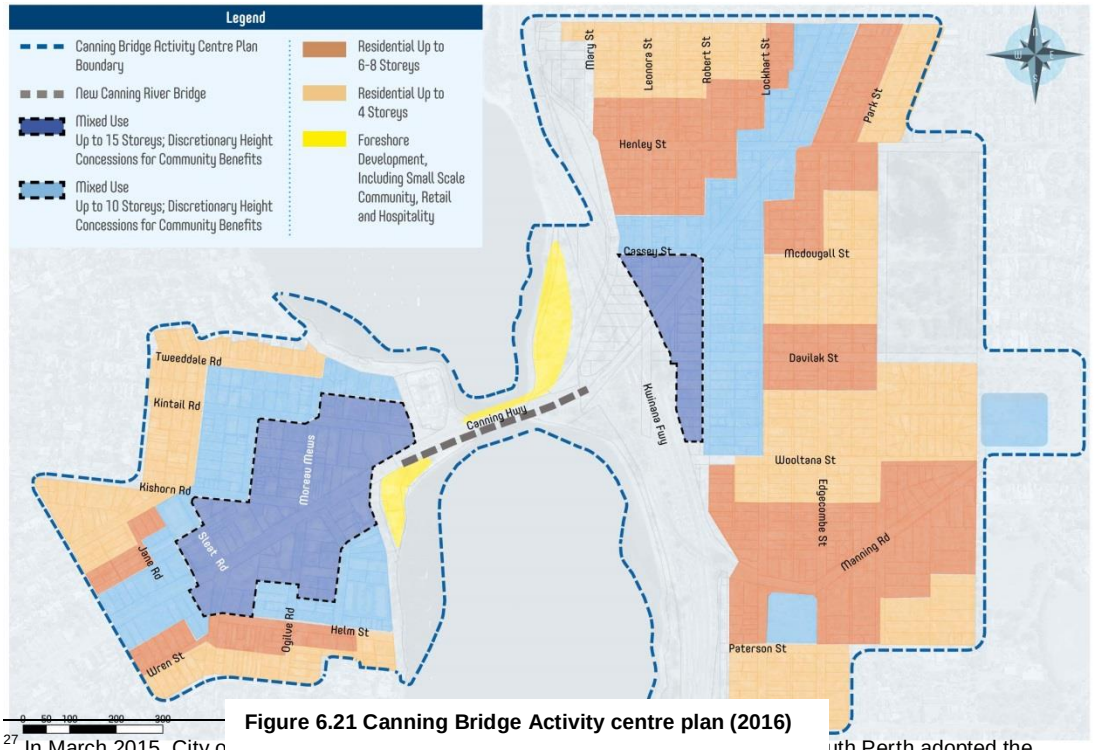


Figure 6.21 Canning Bridge Activity centre plan (2016)

Figure 2 Canning Bridge Activity Centre Plan Land Use, Built Form and Zones

[27] In March 2015, City o uth Perth adopted the structure plan (http://www.southperth.wa.gov.au/Documents/Planning/Precinct-Studies/Canning-Bridge-Rail-Station-Precinct/Where-to-from-Here-Canning-Bridge-Structure-Plan-11.05.2016.pdf).

[28] http://www.southperth.wa.gov.au/Documents/Planning/Precinct-Studies/Canning-Bridge-Rail-Station-Precinct/Canning-Bridge-Activity-Centre-Plan-18-April-2016.pdf

In this final version, building heights ranged from 4 to 15 storeys. The mismatch exists even in the final plan. The following section discusses the outcomes of the questionnaires. They were distributed in October 2012, a year after GHD plan vision (the first proposal) was released and which was followed by community opposition.

C. Questionnaires results for Canning Bridge:

Survey questionnaires, as mentioned in the previous chapter, were designed and developed according to *the desirable density* framework. Initial questions were mainly about the demographic characteristics of the respondents. Other questions covered residents' dwelling type preferences and the physical and social characteristics of desired living in a dense area (Appendix A). Although the results of this case study cannot be statistically substantiated due to the small number of respondents (low power of statistical test), its results are in line with the more powerful and rigorously substantiated aggregate results in chapter nine. Therefore, it can be conjectured that a larger survey would substantiate each individual case as well.

C.1 Demographic profile of respondents

Survey results indicate that the retirement cohort (over 55 years of age) is the main age group among the respondents (51.5%) and that 60.7% of respondents are households with 2 people or less. This means that 60% of respondents are households that live as a couple or alone without any children. Less than 40% (37.4%) of respondents are family i.e. couples with children, single parents with children and group households of family members. Home ownership rate is high as 75.4% of respondents own their property, either having a mortgage or having no mortgage, while 20.2% were renting, mostly in the Como area.

Respondents are affluent, as 47% of households are earning over 120K ($2,300 per week including tax, superannuation, and health insurance) which is a high income bracket, and more than 61% of households are earning

more than 90K ($1,730 per week), putting them in a middle income bracket. The results also highlight that 71.7% of respondents live in low-density housing, in either a detached house, or a single storey villa or unit, while 18.4% live in medium density townhouses or terraced houses and 7.9% live in apartments. Respondents living in this area might possibly feel more attached to their neighbourhood than other case studies. As more than 50% (53.2%) of them have lived there in their current home for more than five years. 22% of these residents have lived there between 5 to 10 years and 31.2% have lived there for more than 10 years.

C.2 Current character of the area, likes and dislikes ('neighbourhood satisfaction')

The questionnaires, with their focus on *desirable density* frameworks, investigated the current character of the area by asking respondents what they most liked, and what they least liked about the area. The written comments for the most-liked characteristics were categorised into six groups; *being close to city, close to public transport, close to amenities, close to family and friends, having special environmental/landscape character and social character*.

More than half of the responses (55.8%), referred to the landscape and environmental character as the most-liked characteristic. Respondents liked the proximity to 'river', 'beautiful leafy streets', 'parks', 'clean' and 'tree-lined streets' of their neighbourhood. Being close to the city is the second most-liked characteristic (52.7%, Figure 6.22).

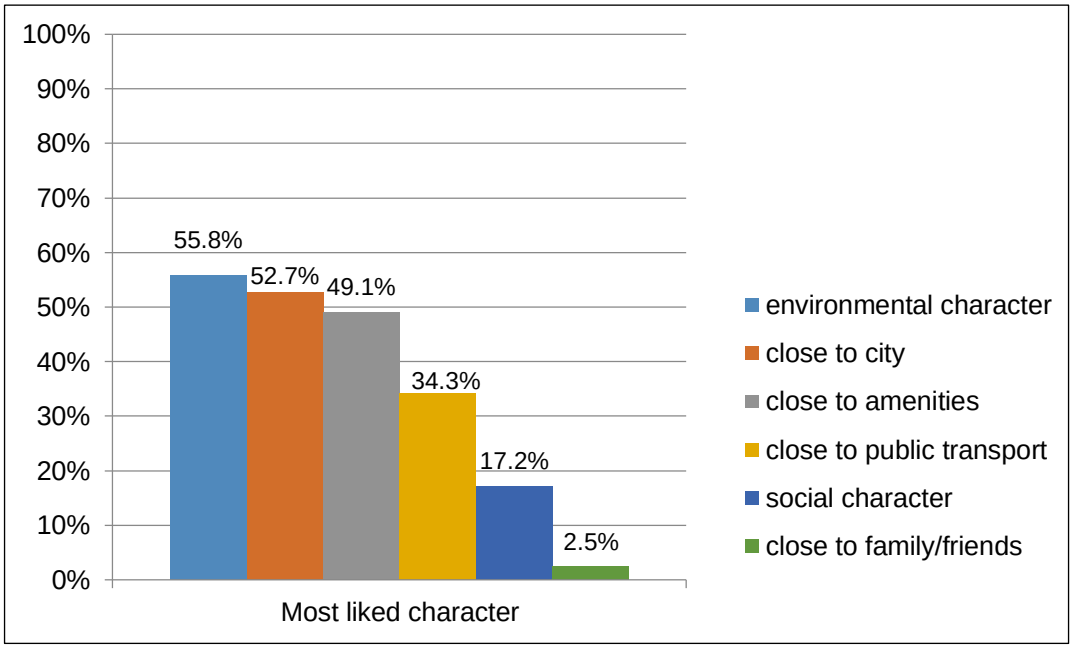


Figure 6.22: The most liked character of the area (n=161)

In describing the social character of the area some respondents report being happy that they live among residents who are 'affluent', 'high-class', 'respectable' and 'of good quality standard'. Comments for the least-liked characteristics of area were categorised into three groups. The first group of comments reflects the area's economic issues such as housing affordability, housing size, property price etc. The second group highlighted issues associated with the environment and amenities such as a lack of services, for instance: no retail outlets or cafes in walking distance, heavy traffic, high levels of noise, lack of parking, lack of trees, etc. The third group of comments focus on social issues in the area such as fear of crime, insufficient security and experiencing frequent anti-social behaviour including disturbances from neighbours, and so on.

Among the three groups, 67.4% of responses refer to existing environmental and amenity problems in neighbourhoods such as heavy traffic, high levels of noise, lack of street parking, being close to main roads, and aircraft noise. Some comments refer to environmental and amenities issues such as: 'parking is a nightmare', 'no parking at the train station', 'traffic during peak hours', 'noise from freeway' and 'busy roads', 'lack of beautification', 'old unkempt houses'. Social concerns proved to be the second most mentioned

category with 17.1% of responses reporting problems described as ‘hooning’, ‘unfriendly neighbours’, ‘people seem to keep to themselves‘, ‘graffiti’, ‘crime’ and ‘anti-social behaviours’. Economic issues mentioned (5.52%) mainly refer to housing affordability. Comments with statements such as ‘high rent’, ‘property price’, ‘incredibly expensive rent’ and ‘wish we could afford nice house’ refer to the housing affordability issue in the area. From 10 respondents in this category, 9 were from Mount Pleasant and Applecross, the affluent part of the catchment area. It is worth mentioning that more than half of respondents (51.5%) were familiar with the concept of Transit Oriented Development, and the potential changes it could bring to their area.

C.3 Desired dense neighbourhood features

Further questions put to respondents encouraged them to specify, and to express their opinions about future changes that may occur as a result of dense developments in their neighbourhood. A dense neighbourhood features list was compiled according to the housing and neighbourhood literature review referred to in Chapter Four, which included physical and social features of a desired place at neighbourhood and home scales.

- **Neighbourhood features**

Regarding neighbourhood features, the results indicate that among physical and social features, the social feature of having ‘a diverse mix of people in the precinct’ is the least desired, followed by the physical feature of ‘availability of different housing types in the precinct’ (Figure 6.23). Another social feature, ‘increasing the chance of meeting more people in the area’, is the third least-liked option in the list, followed by a physical feature, ‘different architecture styles within the precinct’.

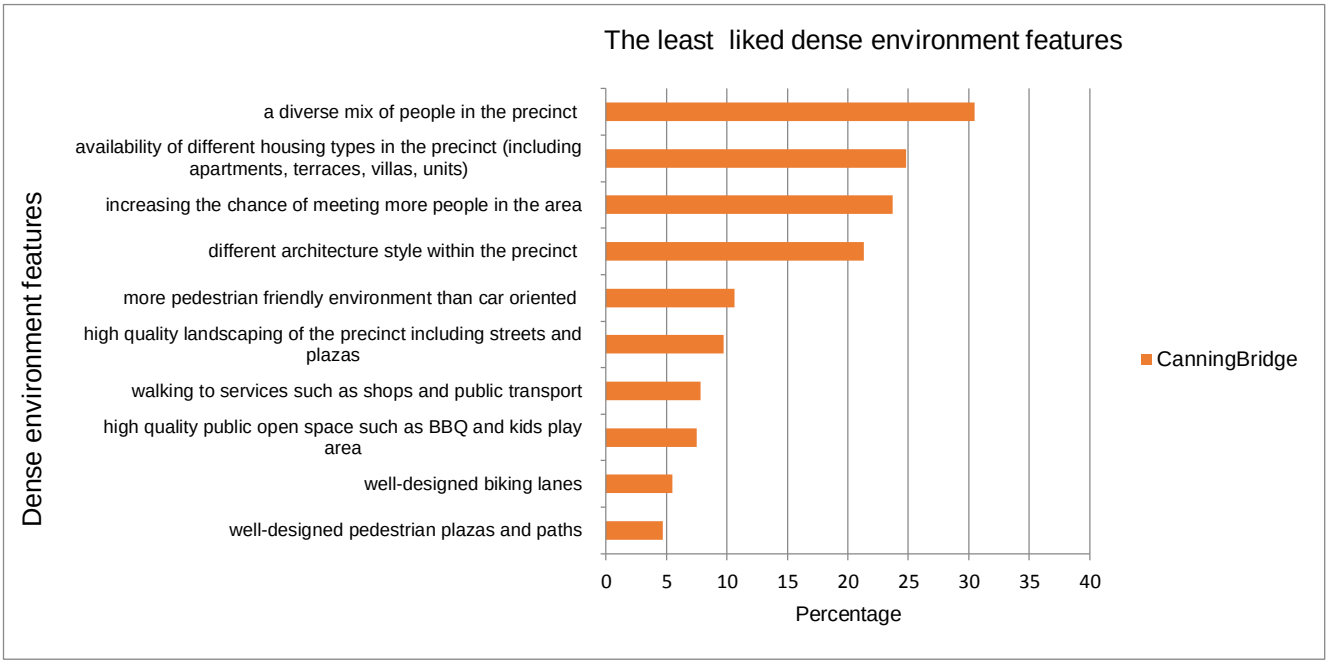


Figure 6.23: The least liked features of a dense neighbourhood (n=163)

Respondents express reasons behind their negative view towards having a 'diverse mix of people in the precinct' in few words in the questionnaires. Comments mainly linked 'crime', 'burglaries', 'anti-social behaviours', 'public housing', 'affordable housing' and 'multi-culture' to 'diversity'. It is clear that the concept of 'low-socio demographic' is linked to 'diverse mix of people'. To the respondents, 'diversity' is mainly perceived as the difference in 'income level' or as one states: 'diversity' may bring 'undesirables into the area'. This reflects the complex nature of a 'place' constructed from physical form, with activities and meanings as mentioned in Chapter Two. The following selected comments[29] clearly show how people link the term 'diversity' to a dwelling form, with social stereotypes carrying particular meanings (discourse analysis):

[29] There were many written comments, only a few were selected to reflect the spectrum of respondents' views.

- *Affordable housing will inevitably bring more anti-social behaviour such as burglaries, drugs, graffiti, car hooning*[30]*,*
- *not public housing tenants,*
- *The price of property and rents will somehow decide who lives where*
- *What to do you mean? will only be certain socio-economic group able to afford to live here anyway,*
- *we paid huge prices for blocks etc. to live here,*
- *because of social issues that come with high density living, also more people more crime,*
- *we have enough burglaries now without the chance of more,*
- *a diverse mix of people bring other elements with hooning, drinking parties late at night,*

Some comments linked 'multi-culturalism' and 'ethnicity' to 'diversity' and associated problems:

- *multi-culture-too much crime*
- *difficult to integrate,*
- *current experience is aboriginal families causing disruption*
- *changes character of Applecross,*
- *may create racial problems,*

It is evident that the term 'diversity' in the context of an affluent well-established area, carries a negative social connotation and reflects existing residents' perceptions towards future population growth in the area. For some of the respondents 'diversity' means 'low socio-economic groups', while for others it means 'ethnic minorities'. Either of these groups are called 'undesirables' in the area as it is assumed they may cause social problems. It might be argued that individual comments are not strong evidence, however, such underlying layers during a community engagement process may join together to result in strong opposition against future planning changes. Opposition may be described as NIMBY, but it is the reflection of hidden concerns.

[30] A person who is driving recklessly and dangerously.

The second least-liked feature, the ‘availability of different housing types in the precinct’, refers to the physical form of dwellings in a dense neighbourhood, and is associated by respondents with high density housing, affordable housing, overcrowding, parking, crime, noise and traffic issues. The following comments reflect such perceptions:

- *Higher density means more traffic in quiet streets, likely increase in crime and graffiti*
- *affordable housing is likely to increase anti-social behaviour*
- *if housing density gets too high, neighbourhood may feel cramped*
- *Worried about cheap, small housing that attracts the criminal element*
- *higher density living will add to the poor and existing traffic conditions*
- *congestion, devaluation on current residence*
- *creates overcrowding, traffic problems, noise, etc.*

Concerns about traffic, parking issues and also the kind of people who may be attracted to different housing types, especially cheap apartments, affected respondents’ perception. While at first sight ‘different’ housing types’ is a physical feature, it is also a social feature as it may attract a diverse mix of socioeconomic groups who are not welcomed and who are regarded as a threat to the social character of the area. Another feature, which is not perceived by respondents as a positive element of a desired neighbourhood, is ‘increasing the chance of meeting more people in the area’. ‘Meeting more people’ is seen as a negative impact of dense living. ‘Unwillingness’ to have contact with new residents, and in particular residents of apartments, are apparent in the comments of disagreeing respondents. The following comments clearly reflect the perceived uncomfortable feeling of the respondents:

- *I am more concerned that an increase in density will impact negatively on the existing 'safe community' feel*
- *people keep to themselves more*

- *High rise leads to isolation and absentee owners. We need family housing in the main with some variety.*
- *more people, not necessarily higher chance to know them*
- *Happy with current neighbours, unlikely to have anything in common with people in high density housing*
- *We may become more insular.*
- *neighbours currently unwilling to make contact*
- *we like more quiet area*
- *sounds like crowded street*
- *How does happen? Does anyone talk to each other walking to or on public transport!*
- *Not really interested, too busy. This is great, but thinks who you "cater for". we still need to do lot of driving to school+ work activities, which makes it more pain with people wandering all over*

The above comments show that spontaneous socialisation was not positively perceived. Describing consequences such as a ‘crowded street’, ‘people wandering all over, ‘we may become more insular’ and ‘unlikely to have anything in common with people in high density housing’ reveal respondents’ negative perception.

The next least-liked feature in a dense neighbourhood is ‘different architecture styles within the precinct’. In describing this feature as undesired, the following comments mainly talk about the number of floors, design quality and concerns with apartment built form styles that are not aligned with existing built form characteristics:

- *There is no desire amongst owner occupiers for there to be properties taller than 2 stories*
- *different styles can be unattractive visually*

- *We have a diversity of architecture due to the fact that it is an old neighbourhood which is to be respected under Directions 2031. The Vision proposes to turn it into a high rise ghetto*
- *Current architecture style is fine*
- *Nothing attractive about, high rise flats*
- *cheaper styles will proliferate*
- *limit 8 storeys*
- *two-storey rendered boxes-lots of them*

It is evident that respondents' various comments include both the physical and social features of a place. The height of the buildings and number of floors are important because of the social changes they may bring.

- **Housing features**

As previously discussed in Chapter Three, desired dwelling type (housing features) also plays an important role in construction of a *desired dense* neighbourhood. The reasons associated with the dwelling type selection also influence residents' perception and is a possible way to investigate the roots of community opposition to densification. It has to be mentioned that in this survey financial constraints of respondents were not considered for their housing preference as the research aims to ask residents to conceptualise future dense neighbourhoods where their home is also located.

The housing options in one of the survey questions were provided alongside an illustration (Figure 6.24). In order to avoid any bias in selecting the preferred dwelling/housing type, black and white images were used. The images were taken from Residential Density & Housing Examples Perth, WA, a government planning document published in 2004.

	**Option1:** 2 or 3 storey Terrace houses
	**Option 2:** Apartments up to 4 storeys
	**Option 3:** Apartments up to 6 storeys
	**Option 4:** Single or double storey detached house
	**Option 5:** Single or double storey grouped dwellings

Figure 6.24: Housing options used in the survey

As the following graph shows (Figure 6.25), respondents in Canning Bridge are still in favour of detached housing (37%) which is usually considered as a low density dwelling type. However, combined medium density dwelling types (2-3 storey town houses: 28% + single or double storey grouped dwellings: 19.5%), appeal to 47.5% of respondents, having more popularity than detached housing, while apartments (high density) remain unpopular (less

than 10%). It is an interesting outcome for an affluent area where more than 53% of respondents live in detached housing, almost 19% in terraced houses or town houses, 18.2% in single storey units or villas and 8.5% in apartments.

The popularity of medium density dwelling types corresponds to questionnaire results indicating the mismatch between supply and demand of such dwelling types. More than half of respondents currently live in low density housing (single storey), while 37% prefer to live in medium density (terrace-houses or grouped dwellings) housing type.

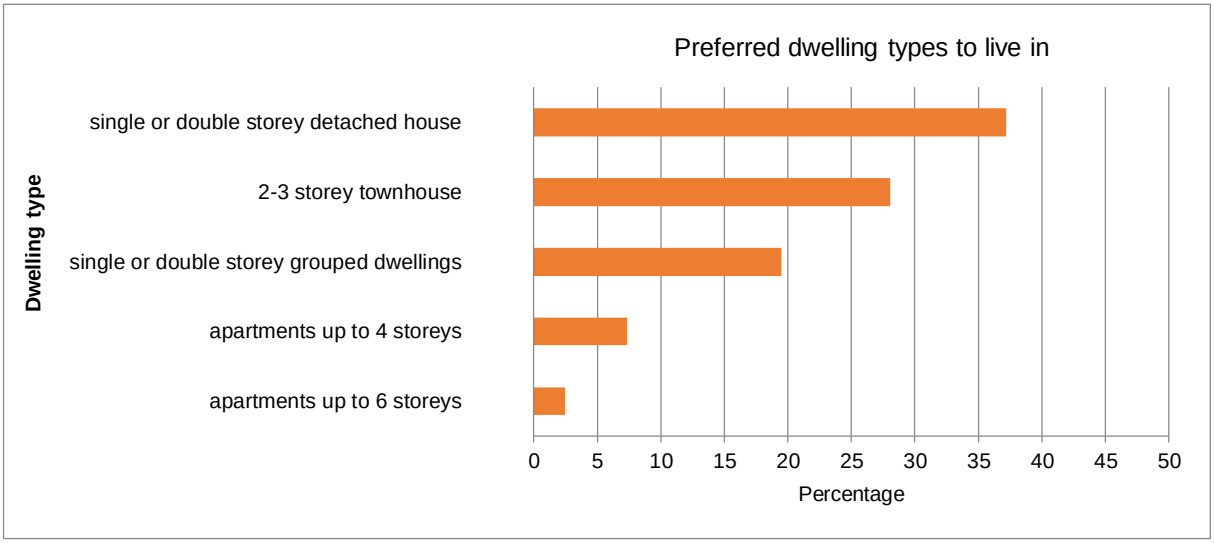


Figure 6.25: Preferred dwelling type for living (n=155)

It is worth mentioning that 53% of respondents of retiring age group (over 55 years of age), 32% of middle age group (between 35-55 years of age) and almost 60% of young age group (between 18-34 years of age) prefer to live in medium density housing (Figure 6.26).

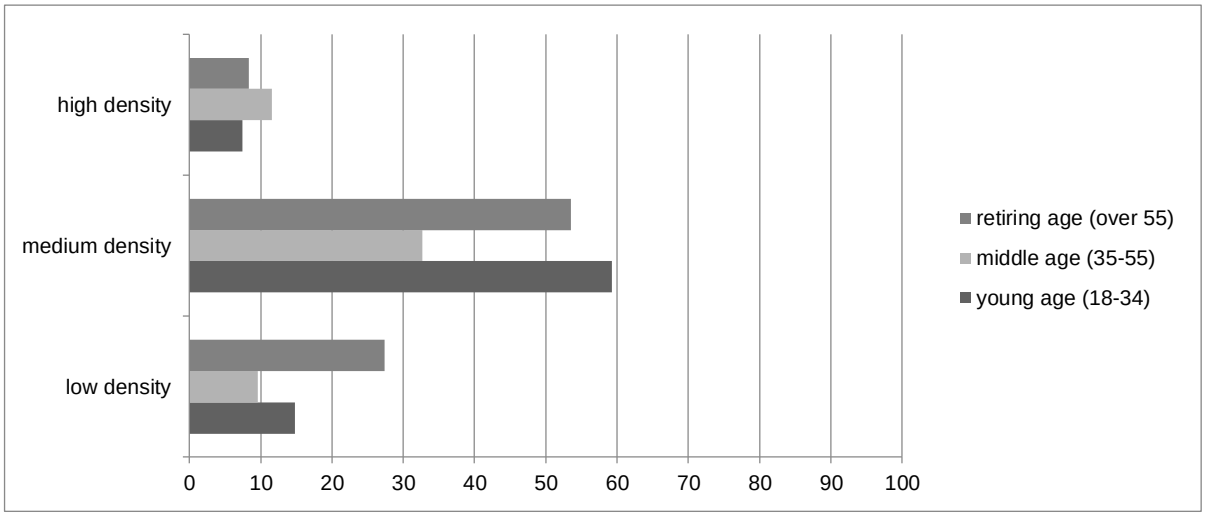


Figure 6.26: Age and preferred dwelling type (retiring age, n=84; middle age, n=52; young age, n=27)

Households with 2 people or less, which include couples without children and persons living alone, prefer to live in medium density housing rather than in a detached house (55%). However, detached houses are still popular among households with more than 2 members (54%) (Figure 6.27).

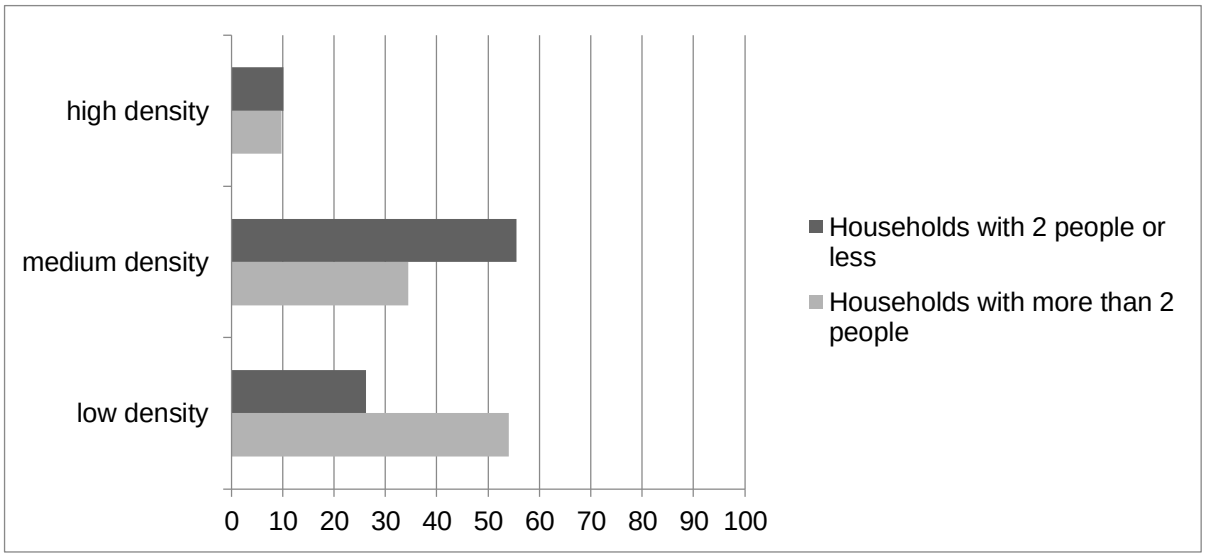


Figure 6.27: Household structure and preferred dwelling type (Households with 2 people or less, n=99; households with more than 2 people, n=64)

Income, one of the major factors in choosing a house, is presented in Figure (6.28) in relation to preferred dwelling type. As expected, high income households (over 120k/year) are still in favour of low density housing (50%) while for middle and low income households, medium density is the preferred option.

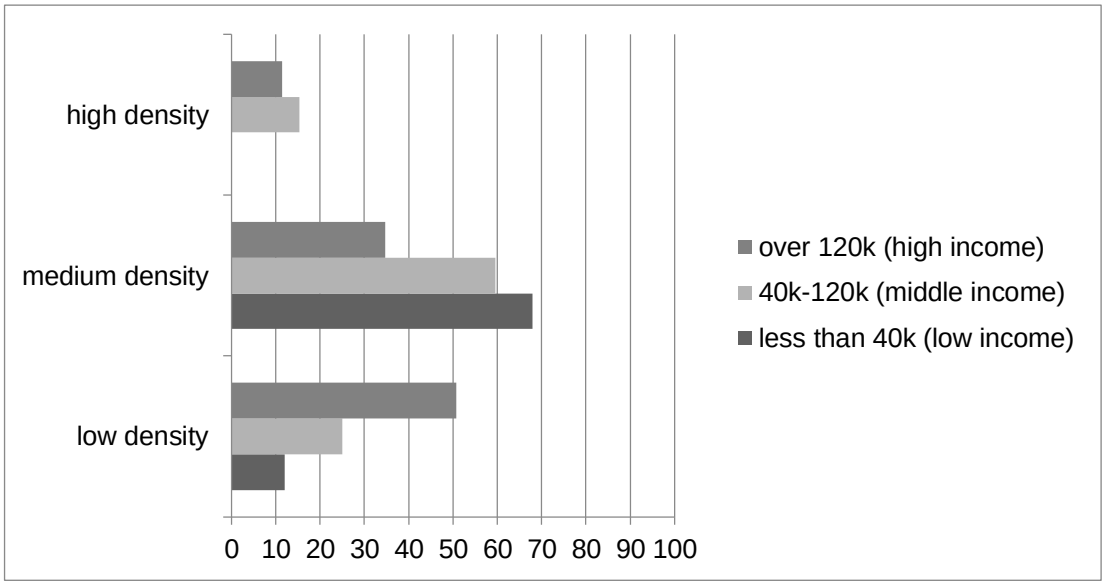


Figure 6.28: Income and preferred dwelling type (high income, n=69; middle income, n=53; low income, n=25)

To aid investigation into the reasons behind respondents' preferences, they were asked to explain in a few words their dwelling type selection. Almost 40% of respondents linked the comfort of living in a detached house to having more privacy, less noise, less traffic, a secure environment, green space or backyard and more space for kids, all of which suits their lifestyle. A few selected comments are:

- *Allows privacy; more chance of greenery/ gardens; limited density means less 'sharing' of noise which impacts on good neighbourly relations; more attractive streetscape likelihood of sufficient private parking hence less crowded streets; lower density easing less street traffic and safer streets for cyclists/ kids/ pedestrians etc.*
- *Less density the better - too many dwellings lead to increased traffic, noise, anti-social behaviour. Loss of views and amenity, overcrowding of what little green space there already is*
- *because it is private, secure and large*
- *enough space for a family plus cars/boat*
- *Enjoy space for living; not feeling cramped by small blocks*

- *I've lived in apartments and townhouses. I much prefer the space and privacy a detached home provides. When I retire and the children move out, I may want to move to a townhouse or apartment but that is many years away. If/when I do move, I would want a larger apartment. Large bedrooms, kitchen, bathrooms, lounge room to fit a grand piano. I never want to live in a cramped apartment again*
- *Strata living restricts independence*
- *more personalised identity, privacy of backyard spaces and dwelling space, acoustic privacy*
- *Your own space with security to raise a young family. Privacy & ability to alter your environment as you wish.*
- *I like my own space- I don't like the feeling of everyone living on top of each other-But if I had to, the 2-3 storey townhouses is my choice.*
- *Prefer Privacy, do not like management fees & levies in village style accommodation*

It is evident that respondents seek to continue their current lifestyle and comfortable living by choosing detached housing. However, as mentioned earlier, people prefer medium density housing to low density housing. It seems that with medium density they can still have their current preferred lifestyle albeit in a smaller size than a detached house.

The popular medium density housing in this case study is 2-3 storey town houses (28%)[31]. It seems that this kind of dwelling type is an ideal option for most respondents if they want to keep a balance between increasing density and the comfortable desired living they seek in a dense neighbourhood.

Referring to this option as a 'low-maintenance dwelling' also reveals the desire of households for living in smaller homes while keeping some features such as back or front yards and their own independence. They even call this option attractive, modern and suitable for a small family.

[31] 19.5% of respondents are in favour of grouped dwelling.

The following comments reflect such attitudes:

- *Easy to maintain, secure, have front/rear gardens, space to entertain or sit*
- *small and close knit but still private and also comfortable*
- *Will minimize traffic issues whilst increases density*
- *Less risk of crime increase*
- *If there is a move to higher density housing. This is a better option*
- *Affordable yet, still adequate of privacy, less noise than apartments*
- *privacy with community feel*
- *would be of a higher price so to attract a certain class of residents so the area stays safe and quiet , also they look good in this precinct!*
- *They are in the middle between single storey units & apartments with several storeys. Good for a family of 3*

Finally, apartments are the least popular dwelling type; a few respondents describe them as ‘large boxes’ which ‘will become slum/low sub quality’. Some residents state that apartments ‘will lock out views’ and ‘increase traffic congestion’ which ‘leads to more anti-social behaviour’.

As discussed above, the previous question sought to determine the desired/preferred choice of dwelling type for living. In order to study residents’ perception of a *desired dense* neighbourhood, the next question in the questionnaire aimed to study respondents’ dwelling preference at the neighbourhood scale. Therefore, it was also asked what kind of dwelling type they prefer to see more of in their neighbourhood if high density occurs. (Figure 6.29).

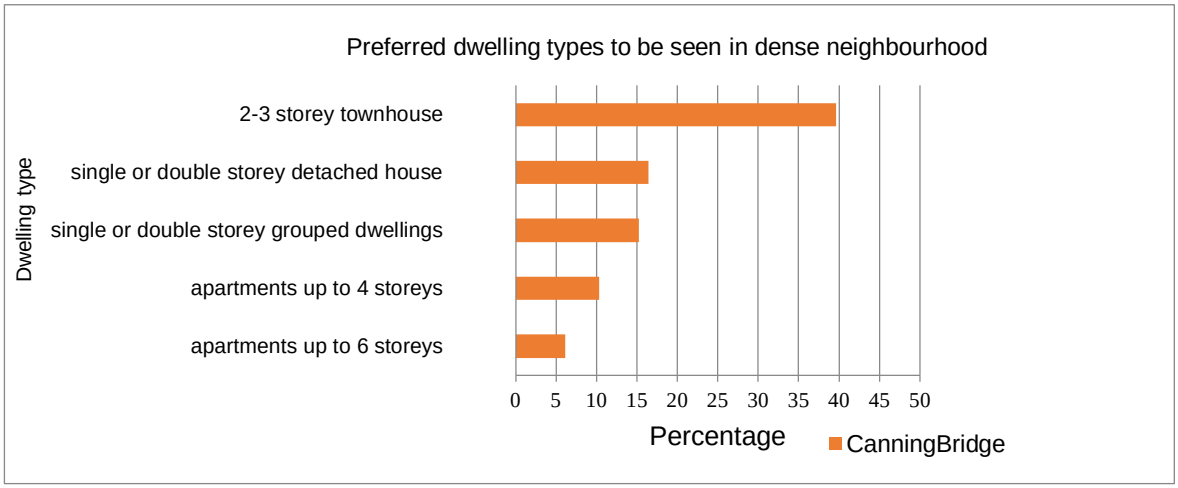


Figure 6.29: Preferred dwelling types to see around the neighbourhood (n=144)

The interesting point was that 2-3 storey town houses prove to be a more popular dwelling type development than detached houses in shaping future *desired dense* neighbourhood. Almost 40% prefer to see more 2-3 storey town houses than detached houses. It reveals that there is a higher preference to see medium density housing in future dense neighbourhoods than other kinds of low or high density dwelling types.

Summary of chapter:

Canning Bridge respondents are affluent and live in inner ring area close to Swan river was assigned as a TOD by Western Australian government for fulfilling future housing demands. While the government pushes for more apartments and high density built form style to achieve the assigned target density, the respondents' view in this area is a different one. The required/target density can be achieved with lower density housing alternatives. Therefore, there are obvious other drivers pushing for this density such as the potential for profit and pressure from developers.

It is apparent that they are not against dense development, rather against the intensity of development. In regard to physical features, preferring medium density dwelling types such as 2-3 storey terrace/town houses to live or see around in their future dense neighbourhood also reflects the type of lifestyle the respondents prefer to have. While the affluent respondents

can afford to choose detached housing life style, they are keen to experience quality medium density life style in the future. In regard to social features, medium density is perceived by respondents as a comfortable choice to live in, and also a safer option than apartments in case anti-social behaviours and crime rates increase in the future. It is also a preferred option in order to avoid attracting low-socio-economic groups to the area who, it is perceived, may cause social problems. As stated earlier, respondents do not agree that having a ‘diverse mix of people in the precinct’ benefits their neighbourhood. They link social diversity to ‘crime’, ‘burglaries’, ‘anti-social behaviours’, ‘public housing’, ‘affordable housing’ and ‘multi-culture’.

CHAPTER 7

Cannington: a middle-ring, middle income TOD

This chapter discusses the questionnaire outcomes of the second case study, Cannington, a middle income area not far from Perth CBD.

Introduction:

Cannington TOD, 800 meters from Cannington station, is a middle-ring area, with middle-income households living in the area. It has the potential for further developments because of its proximity to major hubs, such as airport, Curtin University, Welshpool industrial area and Perth CBD (Figures 7.1 and 7.2). Its cultural diversity gives another particular demographic dimension to the area.

Figure 7.1: Cannington Station and its surrounding areas aerial view from south east to north west (source: google map)

Figure 7.2: Canning City Centre Context (source: Canning City Centre, Activity Centre Plan prepared by the City of Canning, September 2016, p.1)

A. Background to the study area

Cannington Station, a major transit node in the area, is located on the south-east train line (Armadale/Thornlie line) which was opened in 1889. The original Cannington Railway Station was demolished during the upgrade of the rail line from diesel to electric in 1988 (Luther, 2011) and currently it is located in an established area, 12 km from the CBD, in the median strip of Railway Parade and Sevenoaks Street (DOT, 2011) (Figures 7.3; 7.4; 7.5). It has a hybrid TOD model similar to Murdoch and Cockburn (Figure 4.13), an integration of rail and buses rather than rail and land uses. Sevenoaks Secondary College, Department of Community Development and Carousel (district shopping centre) are also located within its catchment.

The lower speed on the adjacent roads and provision of car parks around this Station are advantageous for Cannington Station compared to the Canning Bridge Station. However, the lack of quality footpaths and biking lanes, and their accessibility to pedestrians and cyclists not being a priority, is a discouragement to high volumes of residents walking and riding to the station.

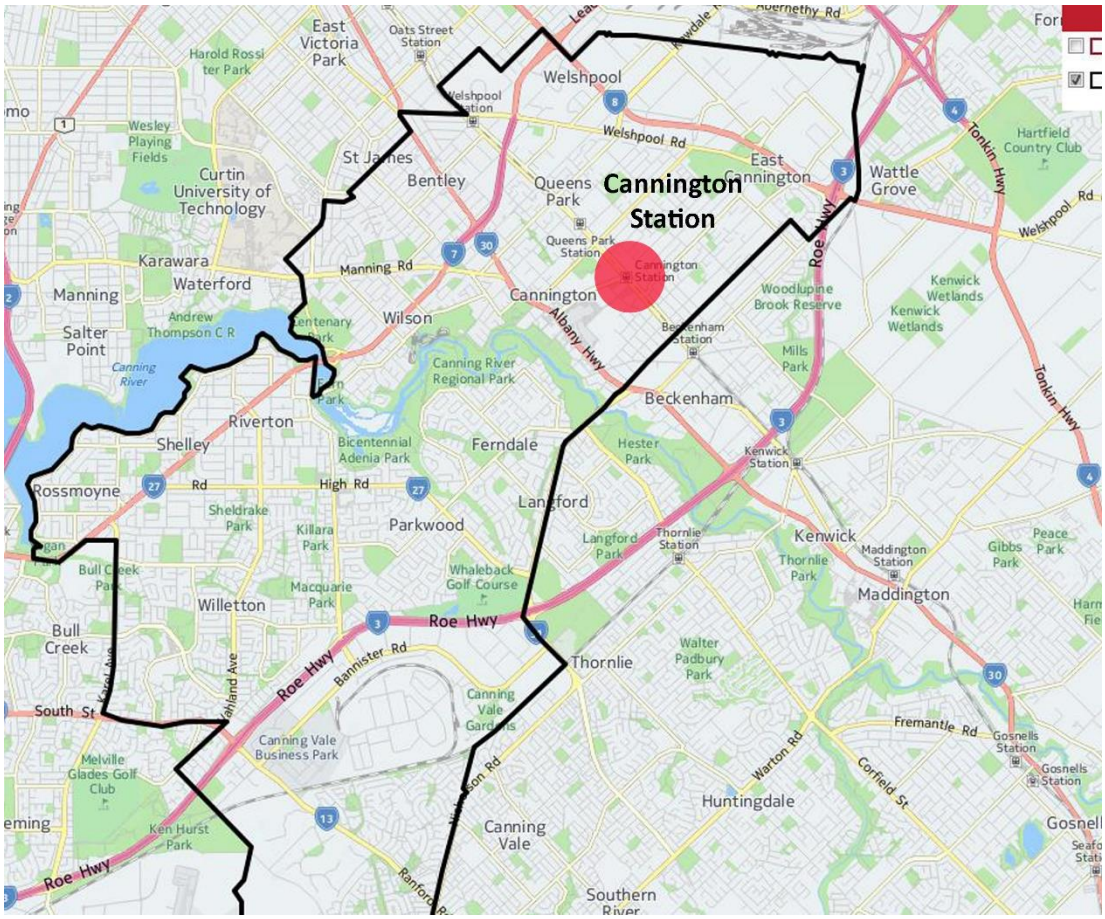


Figure 7.3: Cannington Station location in City of Canning (source: prepared by the author, background map is from council website)

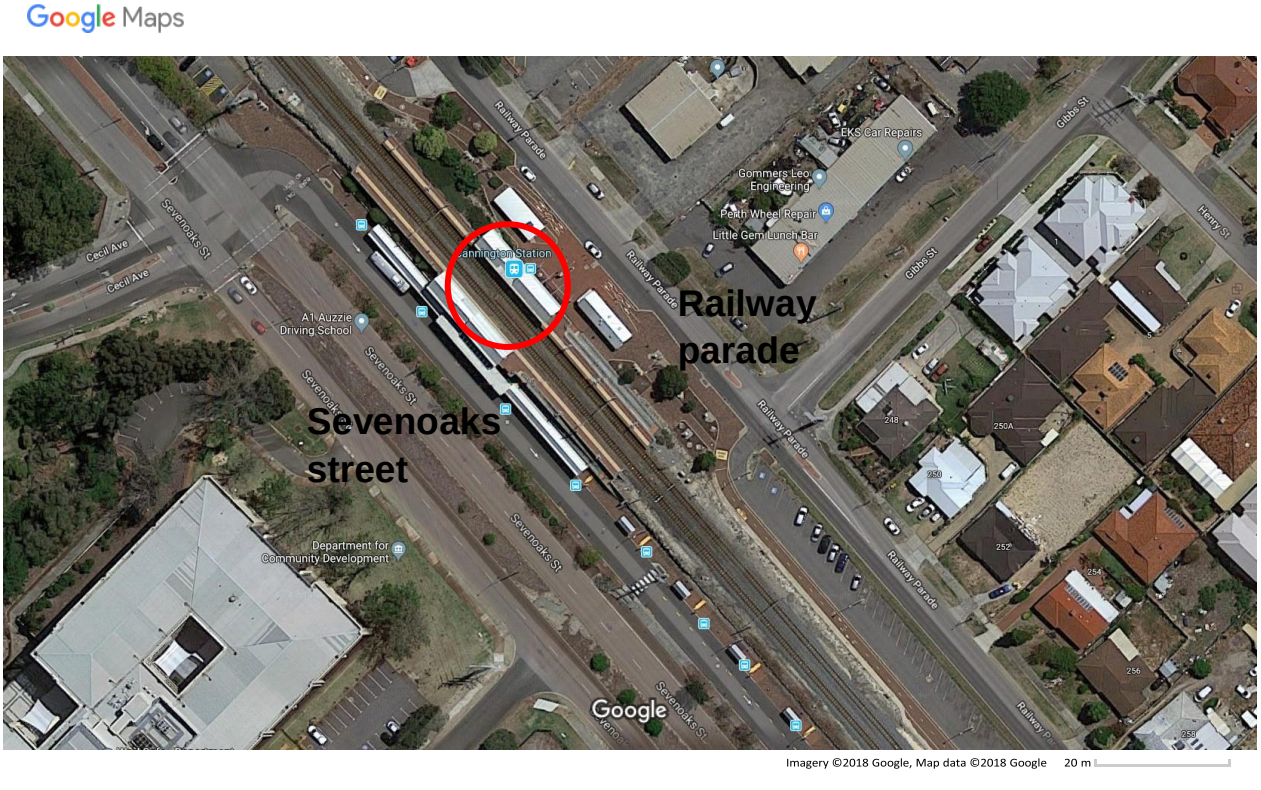


Figure 7.4: Cannington station in the middle of Railway Parade and Sevenoaks Street

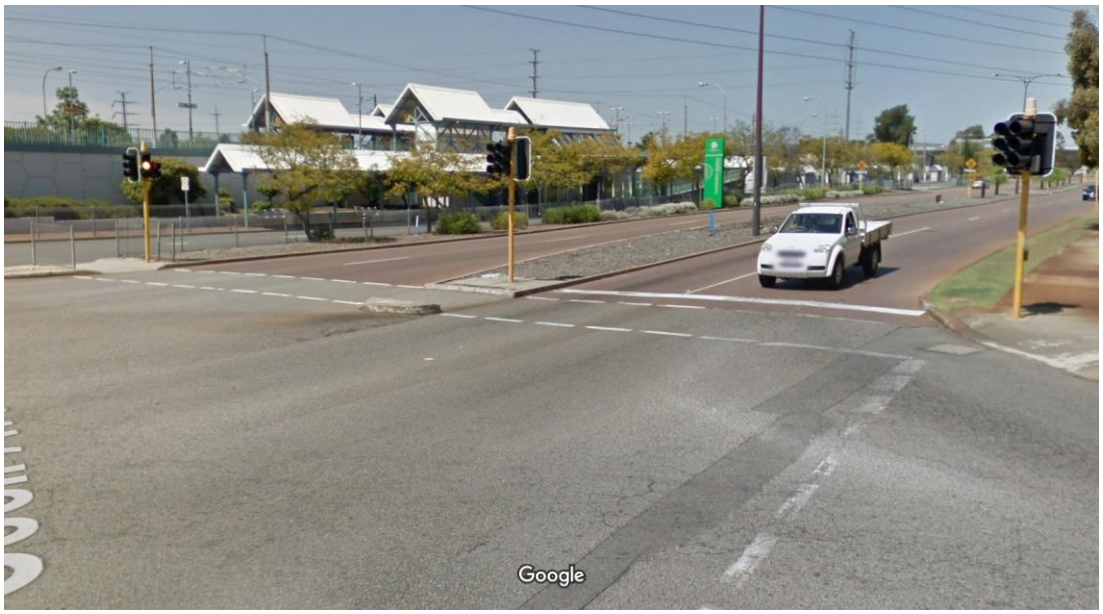


Figure 7.5: Cannington Station view from Railway Parade on the west side (source: google map, 2018)

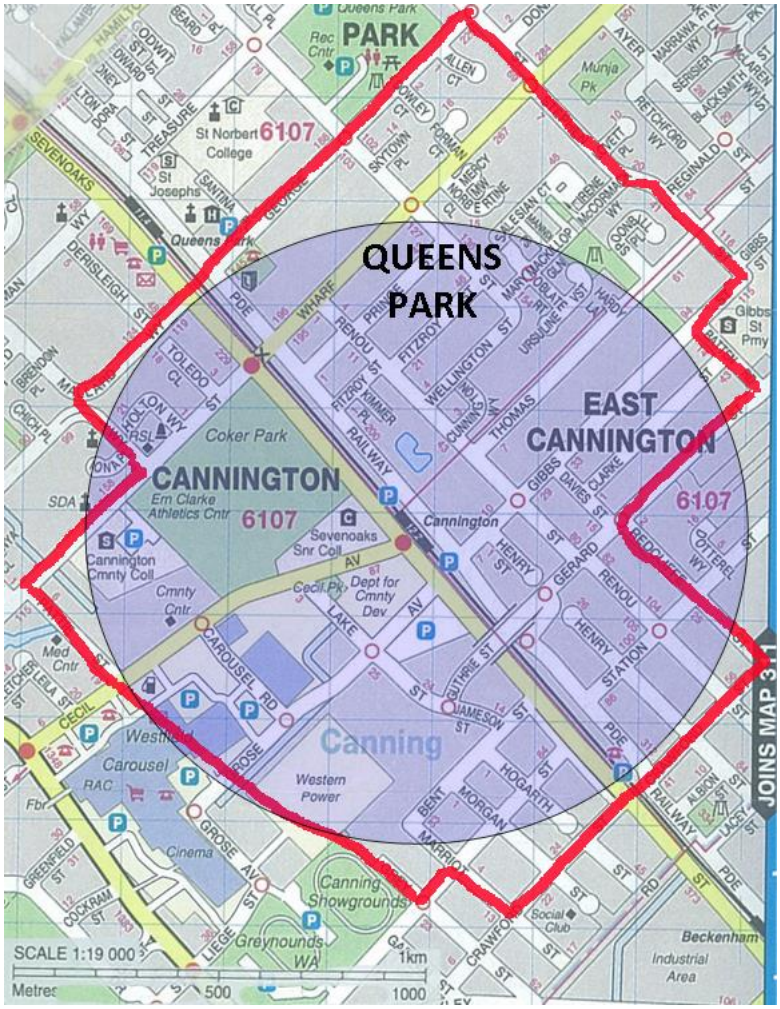


Figure 7.6: Cannington Station activity centre map. Purple circle indicates 800 meters; however, the red line represents the extent of data collection boundary for the research. (Prepared by the author)

The major large non-residential sites in walking catchment of the station are Coker Park on the west side, the Western Power site and Westfield Carousel Shopping Centre on the south-west. Therefore, in order to gather more data from the residential areas in close proximity to the station, the study boundary was extended from the northern side where residential construction was more active than other sides of the catchment area.

The following images (figures 7.7 to 7.15), taken by the author in 2018, show existing new and also old dwelling types in the case study area. While a few years ago, the catchment area was mainly dominated by single or double story detached houses, in the last two to three years (2015, 2016, 2017), medium to high density housing such as low and high rise apartments and grouped dwelling of town houses have been quickly transforming the Cannington area. However, there is concern about the quality of such developments in this area, as the area is known for attracting low to medium income earners.

Figure 7.7: Double storey grouped dwelling (source, taken by the author, 2018)

Figure 7.8: Four-storey apartment building in the middle, on the left an old single storey detached house and on the right double storey grouped dwellings (source, taken by the author, 2018)

Figure 7.9 (left): Ten-storey apartment building in the catchment area of the station (source, taken by the author, 2018)

Figure 7.10 (right): Ten-storey apartment building opposite Carousel, the major shopping centre's parking (source, taken by the author, 2018

Figure 7.11: Eight-storey apartment buildings in the catchment area close to the major shopping centre (Carousel) (source, taken by the author, 2018)

Figure 7.12 (left): Double storey terrace houses

Figure 7.13 (right): Single and double storey detached housing (source, taken by the author, 2018)

Figure 7.14: Single storey grouped dwellings

Figure 7.15: Double storey grouped dwellings

B. Planning proposals for Cannington TOD development

In the West Australian Planning Commission (WAPC) State Planning Policy 4.2, Activity Centres for Perth and Peel (SPP) document, Cannington is designated as a 'strategic centre' with a target density of R135 (135 dwellings per hectare).

Following the 2010 publication of 'Directions 2031 Spatial Framework for Perth and Peel', the City of Canning started to develop an activity centre plan for areas around Cannington Station. At the same time as the commencement of this research, a community engagement program was developed in the City of Canning to outline the City's future vision (City Future, 2012). Different methods were used to collect data from the community (City Future, 2012, pages 8 and 9)[32] in a thorough community engagement plan conducted prior to city centre activity proposal. While there were different community engagement methods for the City Vision project, there was no specific community engagement process for the Cannington

[32] Methods included:

- Speaker Series (March 2011): 'The community was invited to participate in an informed conversation around a variety of topics'.
- Community Perceptions Survey (July 2011): '402 Canning residents were randomly selected to participate in a phone survey to measure satisfaction with the City and identify performance gaps and opportunities'
- Canning Stories (Cultural Mapping, August 2011): 'a process began using film, photography and the written word to capture local people's connections to the City and ideas for the area's future'
- Online engagement (August 2011 to January 2012): 'an online forum was available for people to leave comments and feedback about the City and its future'
- Stakeholders Workshop (September 2011): 'a workshop involved 41 participants to determine: (1) The major issues in the City; (2) Who needs to be included in the community engagement and; (3) Ways that local people could participate'
- Accountability Group (September 2011): 'a group of eleven residents volunteered to provide continuing community involvement with the Community Plan and ensure the inclusion and representation of community views. The Group meets monthly to advise Council on a range of community engagement topics'.
- Photovoice and Vox Pops (September 2011 to March 2012): 'people were provided with creative ways to share their thoughts. Photovoice is for people aged between twelve and twenty-five who live in the City. Vox Pops are audio snapshots of people's opinions. The theme of this engagement was 'Life in Canning: As I See It'.
- SpeakOuts (October to November 2011): 'people had an opportunity to informally attend a series of facilitated events around the City to voice their opinions on a range of different topics in a variety of ways. There were approximately 300 attendees at the six events over a period of seven weeks'.
- Sector Groups (November and December 2011): 'conversations were held with eight different assemblies of stakeholders within the community to gain an understanding of their opinions and ideas for City'.

City Centre Activity Centre planning proposal as there was for the Canning Bridge area.

The City Vision community consultation process reflects the Cannington residents' general opinion of future density targets in the area.
Regarding the issue of density and housing participants were in favour of low to medium density housing (Speaking out report, 2012, pages 18 and 32). Some were also aware of the need for density in order to stop urban sprawl (Speaking out report, 2012, page 18). As stated in the 'speaking out' report, some residents were in favour of town houses for current subdivisions (grouped dwellings) and prefer to see R40 and R100 around transit nodes (Speaking out report, 2012, page 33). The issues such as untidy verges, and the lack of parking as a result of a high student population and a high number of rental properties, were also mentioned (Speaking out report, 2012, page 33).

Some did not support high density, citing problems such as lack of space for kids to play, lack of trees, loss of privacy, trouble, noise and an increase in crime (Speaking out report, 2012, p.46, 72, 73, 84, 96, 144,158, 182). Locations around train lines were places in which some residents supported higher density developments (Speaking out report, 2012, p.46).

The main area assigned to Cannington Activity Centre includes major commercial areas such as Carousel Shopping Centre, a few parks and open spaces, and Western Power substation (Figure 7.16). The main residential blocks are located on the North; East and South sides of the station and are mainly single residential houses or double storey grouped town houses.

Figure 7.16: Activity Centre Plan Area boundary (source: Canning City Centre, Activity Centre Plan prepared by the City of Canning, 2016, page 14)

In September 2016, the final plan for the Canning City Centre structure was released and submitted to the Western Australian Planning Commission for approval[33]. The following map (Figure 7.17) is of proposed building heights. Heights range from 2 to 9 storeys with two areas up to 14 storeys. The maximum height adjacent to existing residential areas on the North, East and

[33] City of Canning (2016), Canning City Centre Structure Plan prepared by the City of Canning file:///F:/Case%20Studies/Cannington/Canning%20City%20Centre%20Activity%20Plan.pdf

South sides of the Activity Centre Plan Area is 6 storeys. Proposed buildings higher than 6 storeys are adjacent to commercial areas. Having vacant lands around commercial areas, the train line and Albany Highway has given council good potential to propose high density developments (Figure 7.17). However, proposed building heights are mainly up to 6 storeys, a modest increase compared to Canning Bridge area, even though the target density for Cannington (R135) is higher than Canning Bridge (R 90).

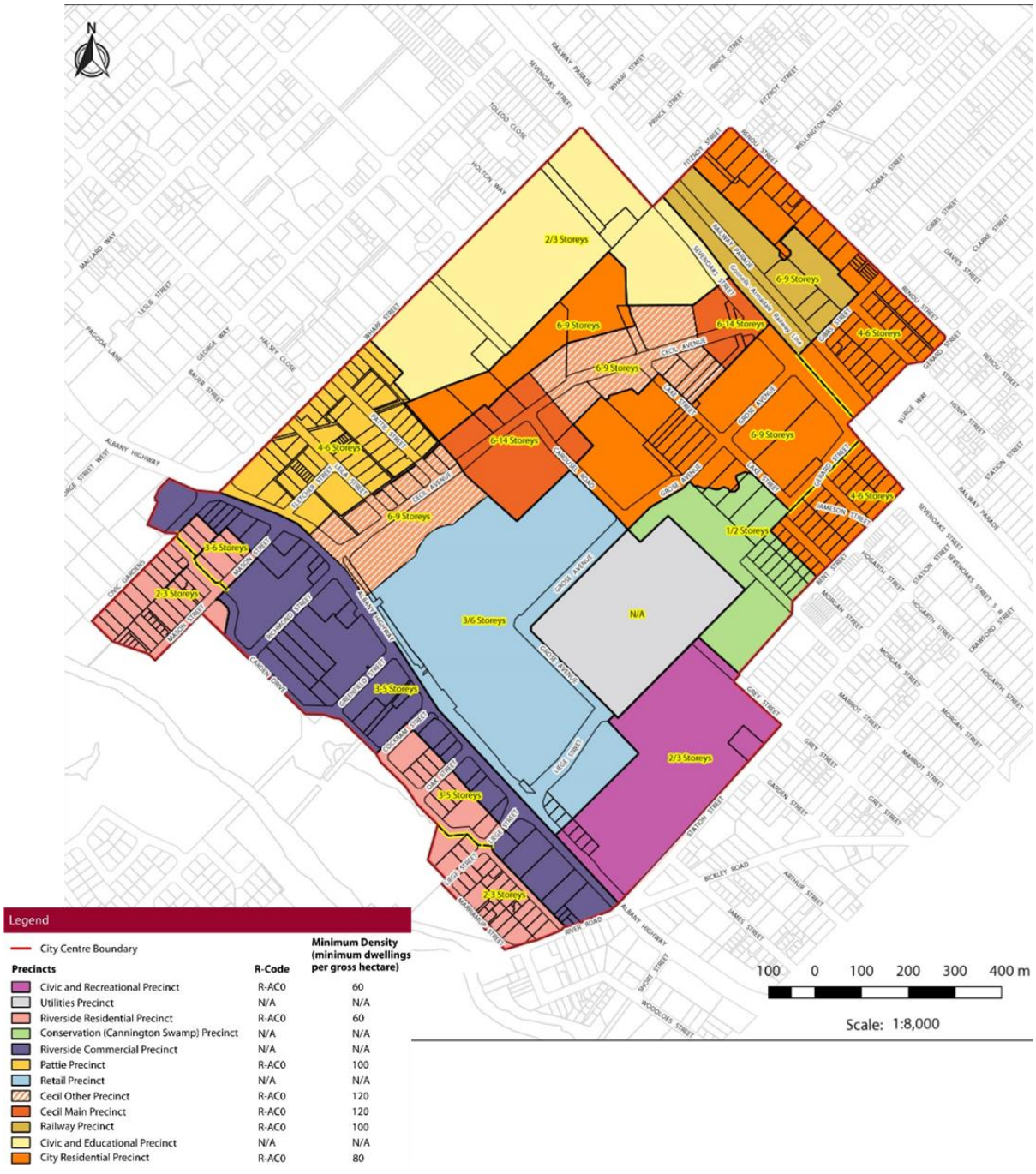


Figure 7.17: Density and Height map (source: Canning City Centre, Activity Centre Plan prepared by the City of Canning, 2016, page.18)

C. Questionnaires results for Cannington:

This section presents the questionnaire results for the Cannington area. The initial questions were mainly about the demographic characteristics of the respondents; other sections discuss analysis of the results. Results of this case study cannot be statistically substantiated due to the small number of respondents (low power of statistical test). However, results are in line with the more powerful and rigorously substantiated aggregate results in chapter nine.

C.1 Demographic profile of respondents

The results show that there are two dominant age cohorts of respondents, the young age group (18–35 year olds) (35.4%) and the retiring age group (over 55 years) (35.4%). The data also shows that 54.4% of households have 2 people or less, for instance couples without children and individuals living alone, while almost 40% (39.2%) of respondents are family groups with dependents, for instance couples with children, single parents with children and group households of family members. Home ownership in the Cannington area is similar to Canning Bridge area with 75.9% of respondents owning their property, some having a mortgage, and some not having a mortgage, while 22.7% are renting. The households in this area are in the category of middle income, as 18.9% of respondents are in high income bracket earning over 120K annually (including tax, superannuation, and health insurance) while 46.8% of respondents earn between 40K to 120K and 20.2% are below the middle income bracket (earning less than 40k annually). Most respondents (91.1%) live in low-density housing, either in a detached house, or a single storey villa or unit, while just 6% live in medium-density townhouses or terrace houses. Similar to the Canning Bridge area, 48.1% of respondents in the Cannington area have lived in their current house for less than 5 years and almost 52% for more than 5 years.

C.2 Current character of the area:

This section of the questionnaires enquires about the current character of the Cannington TOD area by asking respondents what they most like about the area and what they least like about the area. The written comments for the most liked characteristics were categorised in six groups which are: being close to the city, close to public transport, close to amenities, close to family and friends, having special environmental or landscape characteristics and social character. More than 60% of the responses (63.2%) indicate that the most-liked characteristics of the Cannington area are being close to amenities such as Curtin University, schools, shops and a leisure centre, and 60.7% indicate the most-liked characteristics are being close to public transport (Figure 7.18).

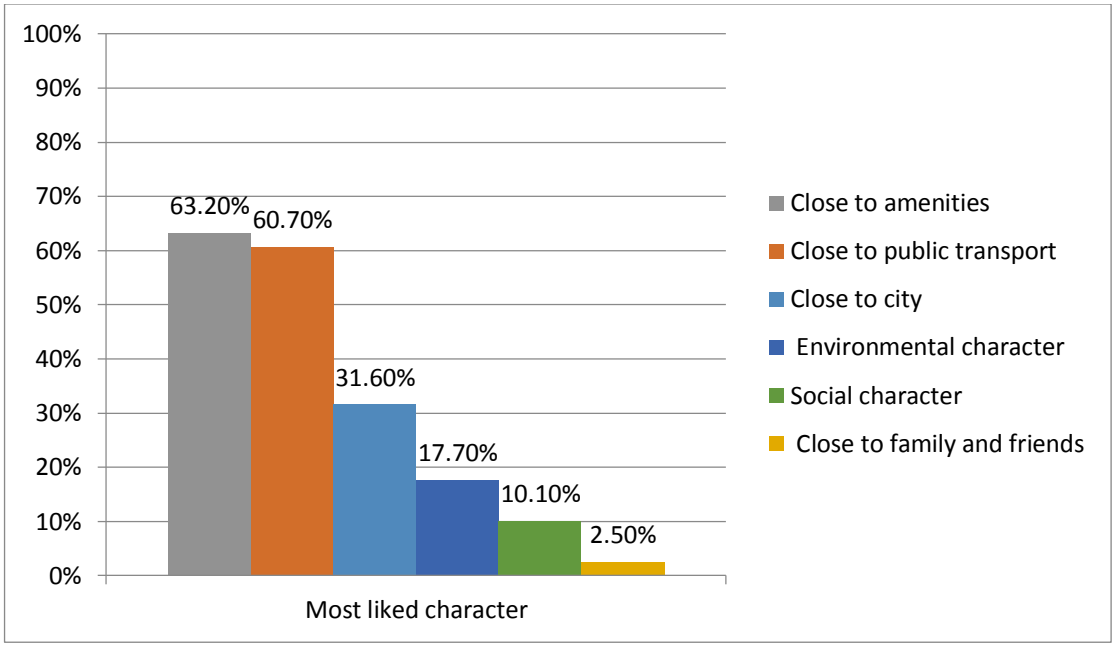


Figure 7.18: The most-liked characteristics of the area, (n=79).

Unlike Canning Bridge TOD area, Cannington TOD area does not have major landscape features such as being adjacent to a 'river' or having 'leafy, or clean streets'. As a result, comments indicate that the most-liked features of the area are their proximity to the large Carousel Westfield shopping centre and station. Therefore participants' comments, such as 'close to transport', or 'close to shopping centre', dominate. Respondents' opinions

were further investigated by asking about the least-liked characteristics of the area. The comments were categorised into three groups: ‘economic issues’, such as housing affordability, property price and so on, ‘environmental and amenities issues’, such as lack of services such as retail and cafes within walking distance, traffic, noise, lack of parking, lack of trees, etc., and ‘social issues’, such as crime, security and anti-social behaviour, neighbours’ behaviours and so on.

Among the three groups, almost 70% (69.6%) of responses refer to existing ‘environmental and amenities problems’ in the neighbourhood, such as traffic, airplane noise, lack of streetscape, lack of trees, poor street lighting, dumped rubbish in wetlands and overgrown verges. These are mentioned most by respondents in identifying the least-liked characteristics of their neighbourhood. Specific comments referring to environmental and amenities issues include: ‘airplanes passing every minute and making lots of noise’, ‘vacant uncared lots’, ‘council could do more on parks etc.’, ‘railway crossing causes traffic in peak hours’ and ‘not kids friendly environment’. Similar comments in City of Canning Speaking Out report also reflect participants’ being ‘frustrated by a lack of property maintenance on verges and in gardens’ (City futures, 2012, p.3).

‘Social issues’ are the second least-liked characteristic with 37.9% of responses reflecting problems with ‘hooning’, ‘crime’, ‘violence’, ‘drugs’, ‘break ins’, ‘bad schools’ and ‘anti-social behaviours’. Comments such as: ‘drugs in the area’, ‘hoons in the middle of the night’, ‘noisy neighbours’, the area being ‘seen as lower to middle [income] class’, ‘gangs of youth on the street’, ‘people who do not try to assimilate’ and ‘security’ refer to social issues. There appears to be some dislike of migrants and ethnicity too, respondents indicate a dislike of the area due to the ‘influx of major groups of Middle Eastern immigrants’ and fear an ‘ethnic majority’. Finally, the responses show only 19% of respondents to be familiar with the Transit Oriented Development, and the potential changes in their area.

C.3 *Desired dense* neighbourhood features

In order to investigate respondents' opinions about the desired features of their proposed dense neighbourhood setting in future, further questions were asked. The comments will be discussed in two sections: on neighbourhood and on housing features, which include physical and social aspects.

- **Neighbourhood features**

Regarding neighbourhood features, the responses from Cannington area were similar to Canning Bridge's data in terms of physical and social aspects. Social features such as having 'a diverse mix of people in the precinct', 'increasing the chance of meeting more people in the area' and physical features such as 'availability of different housing types in the precinct' and 'different architecture styles within the precinct' were the features deemed least popular (Figure, 7.19).

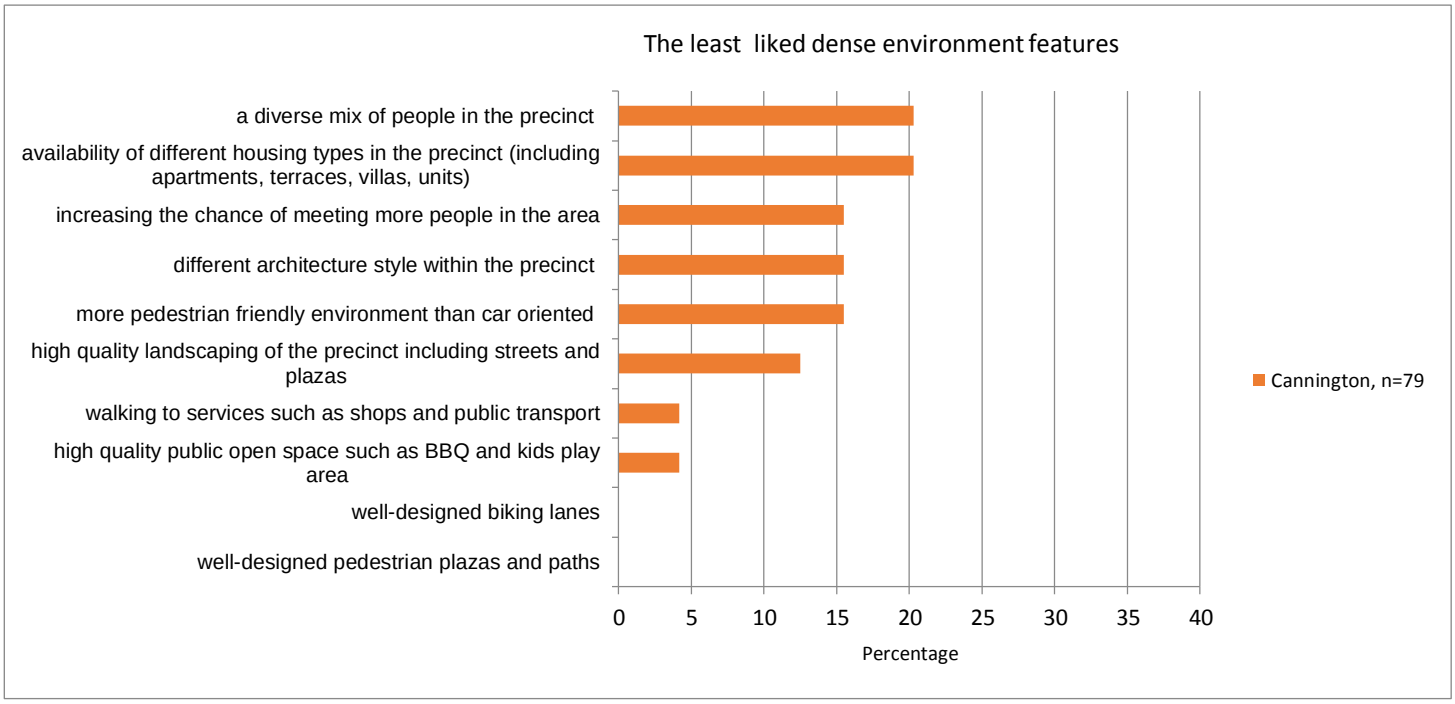


Figure 7.19: The least-liked features of a dense neighbourhood (n=, 79)

Respondents stated their opinions on each feature, which show that having 'a diverse mix of people in the precinct' was perceived negatively. Comments

linked this social feature to ‘social housing’ and ‘racial problems’. The following selected comments are a few of many comments about this issue.

- *limit social welfare housing*
- *always racial trouble*
- *not everyone gets along*
- *too crowded*
- *This is currently not diverse!*
- *influx of people on welfare*
- *Australia is racist*
- *current people attracted to area are different*

In expressing why, they are of the opinion that the ‘availability of different housing types in the precinct’ is an unattractive feature for their future dense area, respondents referred to related social issues such as high crimes rate, lack of privacy and open space. Below, a few comments were selected out of many.

- *gets too built up*
- *too many units*
- *Believe there is still need for detached houses*
- *with higher density living, more crime*
- *don't want someone looking in my backyard*
- *increase population no tranquillity*
- *concentrated living will cause trouble*

The third most unpopular feature noted was ‘increasing the chance of meeting more people in the area’, an aspect of density not perceived by respondents positively. While there are various reasons for the unpopularity of this feature, it is evident that the lack of interest for spontaneous socialising is the underlying concern. Each comment shows the negativity from a different respondent’s viewpoint, reflecting the current social problems.

- *I don't know if this is important, as people have their own networks and don't necessarily connect with neighbours as we used to*

- *not enough time to 'catch-up' with those currently on 'friends' classification list!!!*
- *or getting bashed*
- *Cannington leisure centre and Carousel already do that. more of this and you see drunk kids picking girls up and bullying*
- *train station is transition area, not to meet people*
- *I don't think it matters either way*
- *influx of riff-raff*
- *not really a necessity*

Furthermore, the following feature, 'different architecture styles within the precinct', was perceived negatively by linking it to high-density developments. Comments mainly suggest that high-density developments make the area unattractive.

- *will not make it more attractive*
- *houses packed in high density*
- *too dense*
- *different styles are ok, but must fit in with each other*

- **Housing features**

Preferred dwelling types, or 'housing features', as stated in Chapter Five, are part of a desired residential setting. These preferences will show the extent of a community's adaptation capacity for accepting future changes in their neighbourhoods. The following graph (Figure 7.20) shows that respondents in the Cannington area are in favour of medium density dwelling types, single or double storey grouped dwellings (35.4%) rather than detached houses (30.3%). While 55.6% of respondents live in detached houses, only 30.3% of them actually prefer such a dwelling type for living.

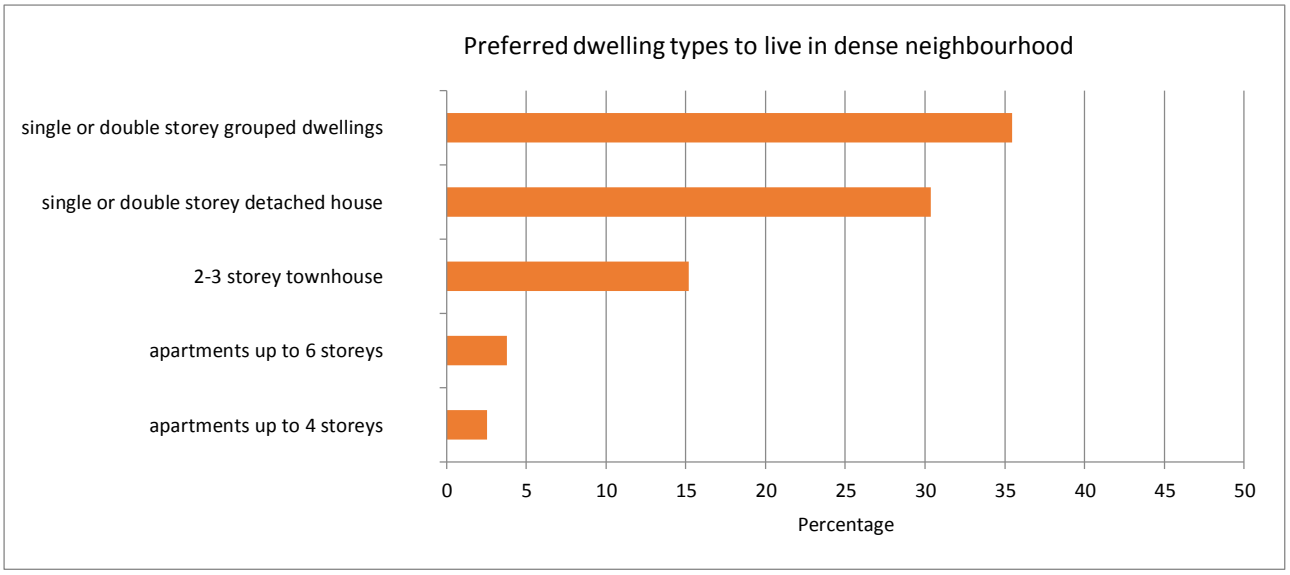


Figure 7.20: Preferred dwelling type for living, (n=69)

Furthermore, all ages are in favour of living in medium density housing instead of other dwelling types (Figure 7.21), but the middle age group is still more interested in choosing detached housing for living compared to other age groups, possibly because of their present family households.

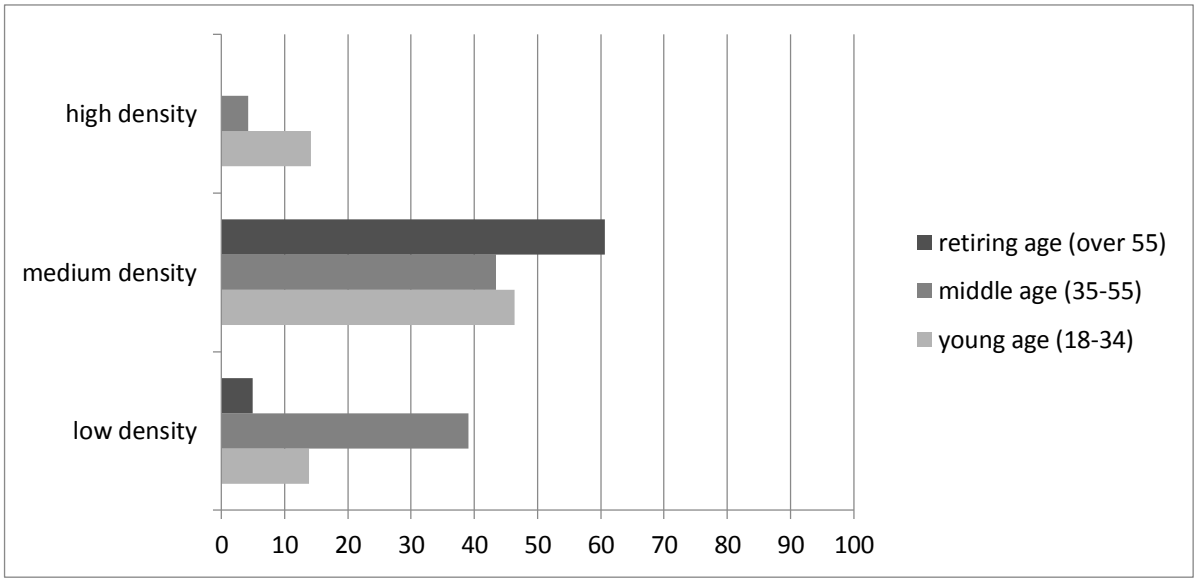


Figure 7.21: Age and preferred dwelling type, (retiring age, n=28; middle age, n=23; young age, n=28)

Households with more than 2 people prefer to live in medium density housing than low density detached houses and households with 2 or less members prefer medium density housing to high density. The interesting point is that

detached housing is not the most favoured option even among households with more than 2 people (Figure 7.22).

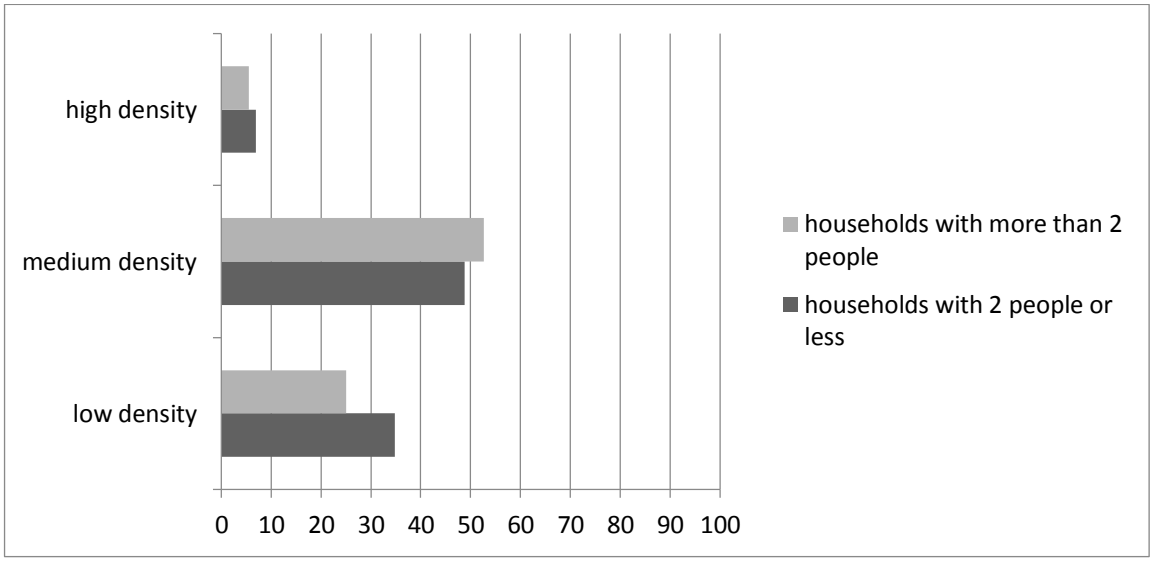


Figure 7.22: Household structure and preferred dwelling type, (Households with 2 people and less, n=43; households with more than 2 people, n=36)

Income and house choices are presented in the following graph (Figure 7.23). It confirms that medium density housing is the most popular option among all income brackets, while high density apartments are the least popular.

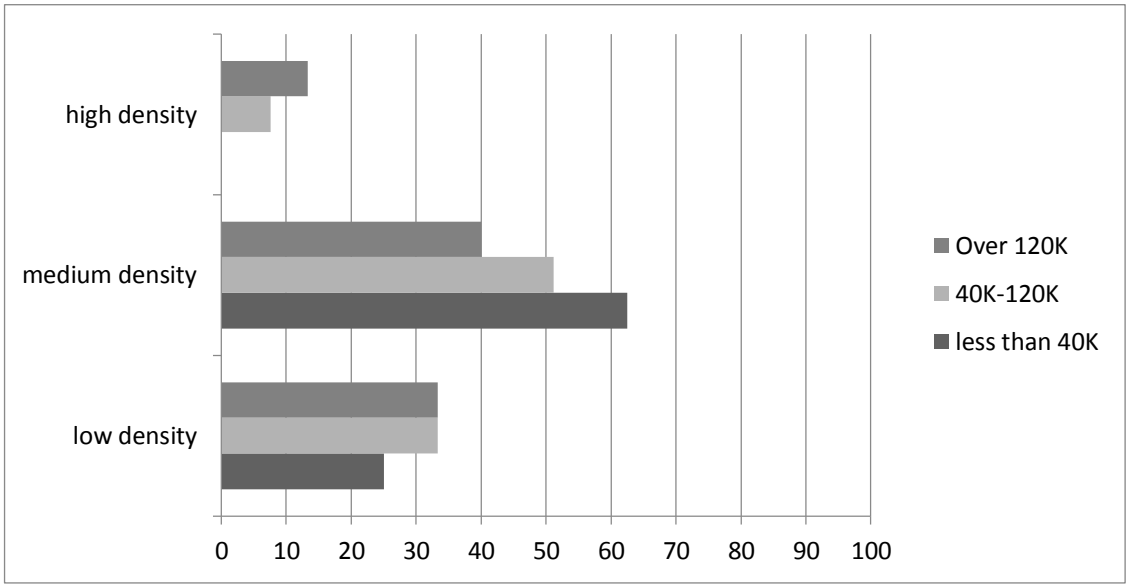


Figure 7.23: Income and preferred dwelling type, (high income, n=15; middle income, n=37; low income, n=16)

Further, respondents were asked to explain the reasons behind their dwelling type selection. As stated earlier, grouped dwelling housing, in particular single storey, (based on the comments) is the most popular housing type among the other dwelling types. Half of the retiring age group prefer grouped dwelling and further explain that it fits better than other options with their aging needs. Relevant comments were discourse analysed to find out the meaning associated to the preferred dwelling. Respondents indicated that grouped dwellings provide 'privacy', are 'stair free', 'suitable for old ages' and have 'small gardens' and are a balance of 'comfort' and 'privacy'. A few comments are:

- *single storey, stairs are no good for old people; it is better for privacy and children*
- *you don't hear what the next door neighbours are doing (TV, fighting etc.), you have your own garden+ lawn space to entertain outside*
- *Privacy, backyard, secure garage, open yard.*
- *represents the suburb outlook instead of city image*
- *single storey, because of age*
- *we prefer family oriented houses*
- *bigger space, more comfortable, more privacy*
- *Gives me more of a feeling to have a living space and garden/courtyard to make my own. It allows for privacy, fewer shared walls but also opportunities to meet neighbours. A single story is also easier to accommodate for people with disabilities who may not be able to use a fire escape in multi-storey apartment building.*
- *walking up+ down stairs gets more awkward & exhausting as one ages*
- *prefer to live in a house with back/front yard*
- *Privacy & comfort living*
- *small gardens, no stairs, community atmosphere*
- *more community oriented*

As part of investigating desired neighbourhood features, dwelling types that respondents prefer to be seen in their neighbourhood were studied (Figure 7.24). It is interesting that unlike the popularity of grouped dwelling as preferred housing choice of living, 2-3 storey townhouses and detached houses are the most desired option to be seen as part of a desired dense neighbourhood.

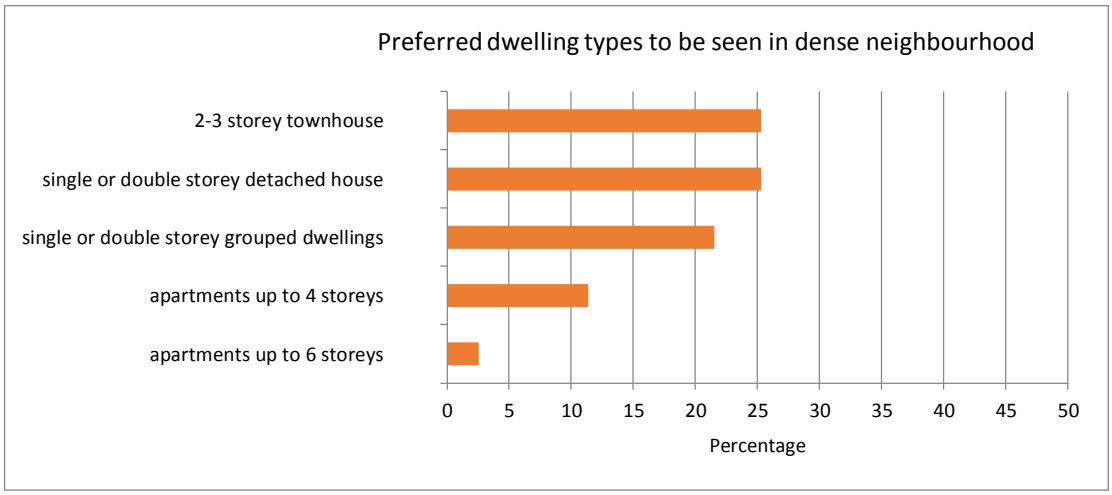


Figure 7.24: Preferred dwelling types to see around the neighbourhood (n=68)

In order to further investigate the respondents' opinions, relevant comments were analysed. The popularity of 2-3 storey townhouses was linked to characteristics such as being 'modern', 'attractive', or 'affordable', and a good choice to balance 'density' and current lifestyle. A few comments are:

- *This is probably what we'd be able to afford so I'd like to see lots of it.*
- *If I had to choose I would again choose this one.*
- *look good and not overcrowded*
- *I like the look of them. Individual families, responsibility for own space. Still economical with land space so not greedy.*
- *Option 1 (yes, It will be fine if they use good building materials)*
- *Funky & Modern easy to maintain=likely to be better kept.*
- *Won't be too compact. It looks better.*

- *Not too high density*
- *Allows for greater density whist minimizing problems associated with social & infrastructure issues*
- *This would be most attractive dwelling*
- *There are already a lot of villas + detached houses in the area. Town houses would provide another option and look smart.*
- *Attractive*
- *Practical & not too crowded*
- *New design and architectural*
- *Architecturally designed. Most look individual, bright, and clean.*

In expressing the reasons for selection of detached houses, comments are mainly about characteristics such as creating a ‘family oriented’ environment and having better ‘privacy’. A few comments are:

- *Much nicer, attracts 'better' people.*
- *Increases value in the area (houses are more expensive) and attracts more affluent couples.*
- *More family oriented more space for families. Townhouses/Apartments can be eyesores if not properly maintained by the occupants.*
- *Privacy*
- *No over population*
- *This type of housing maintains quality of living and keeps the Australian dream of owning your own patch of lawn alive;*
- *Aesthetic value*
- *I like my children to be able to play unsupervised in the back yard.*
- *Allows for more privacy, the cultivation of gardens while have many benefits.*
- *Less cluttered , views not obstructed*

Summary of chapter:

Majority of Cannington respondents are middle-income households, live in the middle ring area. Area has been nominated as a TOD with a higher target density than the Canning Bridge area. While the middle income group is dominant among respondents (46.8% of respondents earn between 40K to 120K), they identify medium density housing as a preferred dwelling-type for living. This is similar to the Canning Bridge respondents, and they express similar reasons for their selection. They believe medium density provides physical features which are a good choice between 'privacy' and 'density', 'attractive', 'modern' and the social feature of attracting the right people into the area. However, in terms of current liked and disliked characteristics of the area, while environmental characteristics, such as the proximity to the river and having leafy streets, are the most-liked characteristics of the Canning Bridge area, for Cannington respondents this characteristic, represented by airplane noise, lack of streetscape and lack of trees, is the least-liked. Furthermore, Cannington area is already an ethnically diverse place, yet, having 'diverse people in the area' is perceived as the least-liked characteristic of a dense neighbourhood, reflecting the negative perception of respondents (social feature). Further comparisons of case studies will be discussed in Chapter Nine.

Figure 8.0: a banner at Wellard Village (taken by the author, 2018)

CHAPTER 8

Wellard: an outer ring, middle income TOD

This chapter discusses the last case study, Wellard. It is different to other case studies in a few aspects. It is located far from the CBD and is the first dedicated pedestrian-friendly, newly built Transport Oriented Development at neighbourhood scale. It is centred around the newly built Wellard train station on Perth's southern train line to Mandurah (Housing Authority, 2016). The aim is also to explore whether the desirable density features of respondents of a newly built TOD area is different of the two established areas.

Introduction

The first section of this chapter discusses the background of the study area, prior to discussing the outcomes of the questionnaires. Construction of the new area, Wellard Village, began around Wellard's new station in 2007 as a joint venture between the Housing Authority and Peet Limited.

A. Background to the study area

Wellard Village is a 31-minute train trip 35 km south of the Perth CBD. It is located south of Fremantle and north of Rockingham, two major centres in the Perth metropolitan area (Figures 8.1, 8.2 and 8.3). Wellard TOD type (Figure 4.13) is mainly designed and developed to enable walking and cycling accessibility to the station.

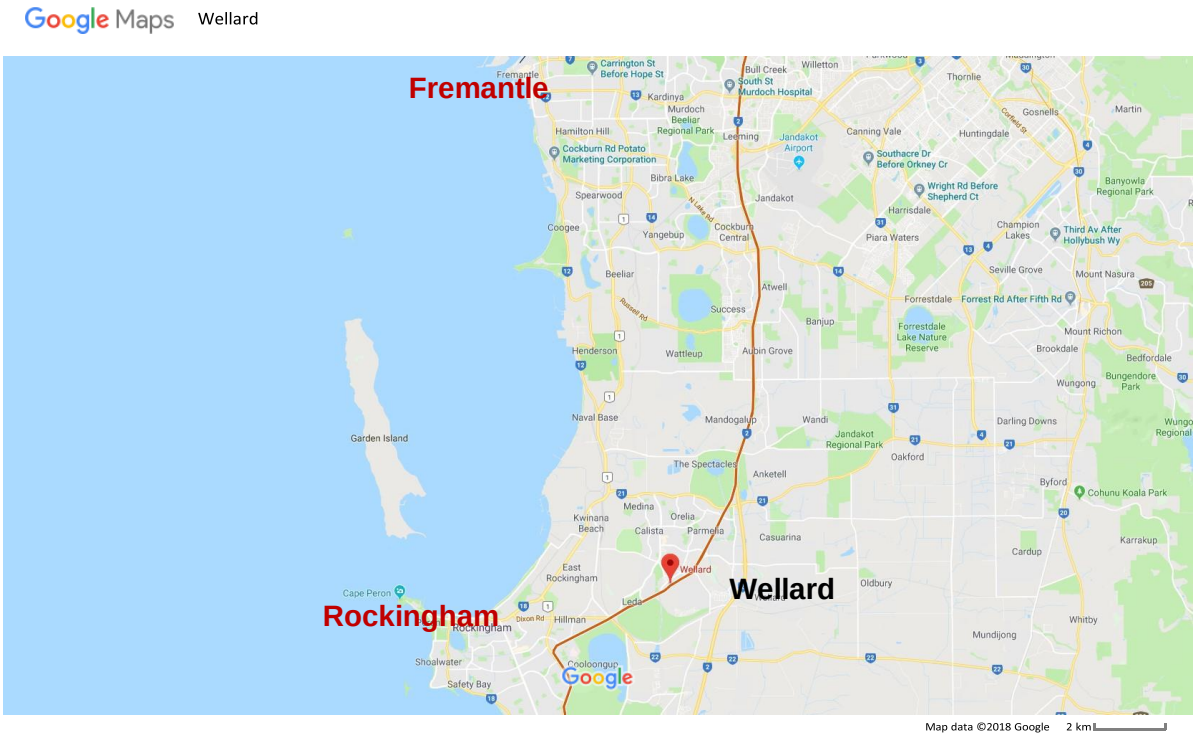


Figure 8.1: Wellard Station location south of Fremantle and
North of Rockingham (source: prepared by the author, background map is from google)

Figure 8.2 (left): Wellard Station entrance (source: https://www.peet.com.au/communities/perth-and-wa/the-village-at-wellard/our difference)
Figure 8.3 (right): Wellard station, view from The Strand street (source: taken by the author, 2018)

The closest established town centre to the station is Kwinana Town Centre to the north, 3 km from the train station, and a 5-minute drive or 10-minute cycle (Figure 8.4) (DOH, 2013).

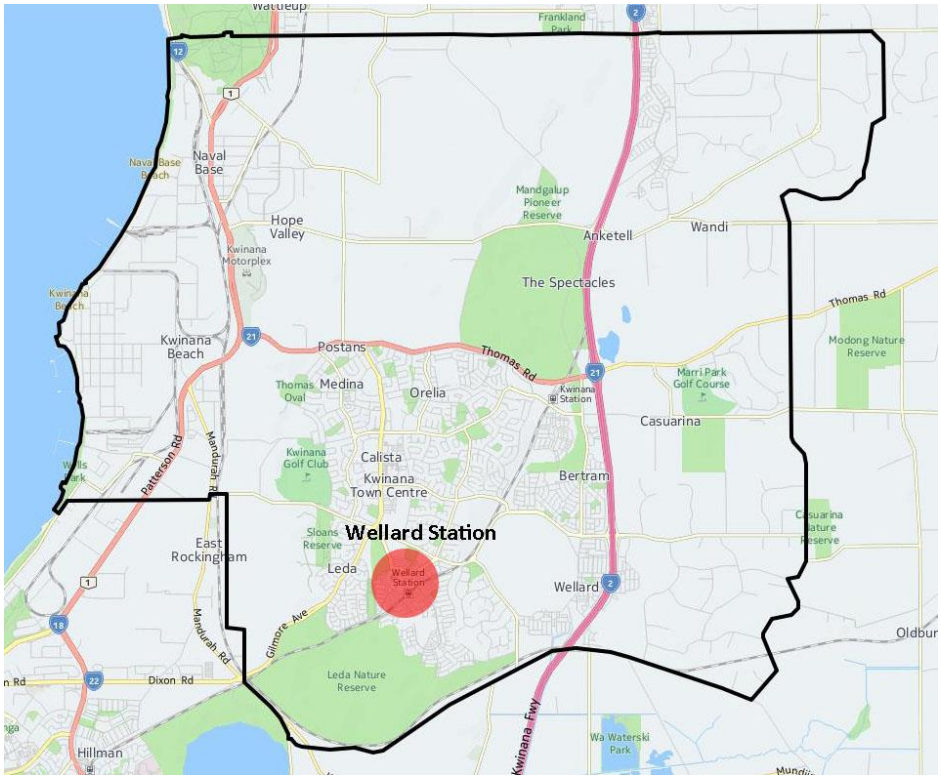


Figure 8.4: Wellard Station location in the City of Kwinana and the established town centre (source: prepared by the author, background map is from council website)

In addition, since 2007 a new neighbourhood centre within the catchment area has been developed (Figures 8.5 and 8.6) which is further discussed in the next section.

Figure 8.5 (left) and Figure 8.6 (right): Woolworths and some shops on The Strand street (Wellard Square) (source: taken by author in 2018).

The catchment area is 800 meters from the train station, 10-minute walking distance, and is part of Wellard (west) suburb. The area is surrounded by bushlands mainly on the west and south west. Most of the southern part of Wellard Station had not yet been developed at the time of data collection in 2012, while the Northern and Eastern parts were newly developed and had had residents for a few years (Figures 8.7).

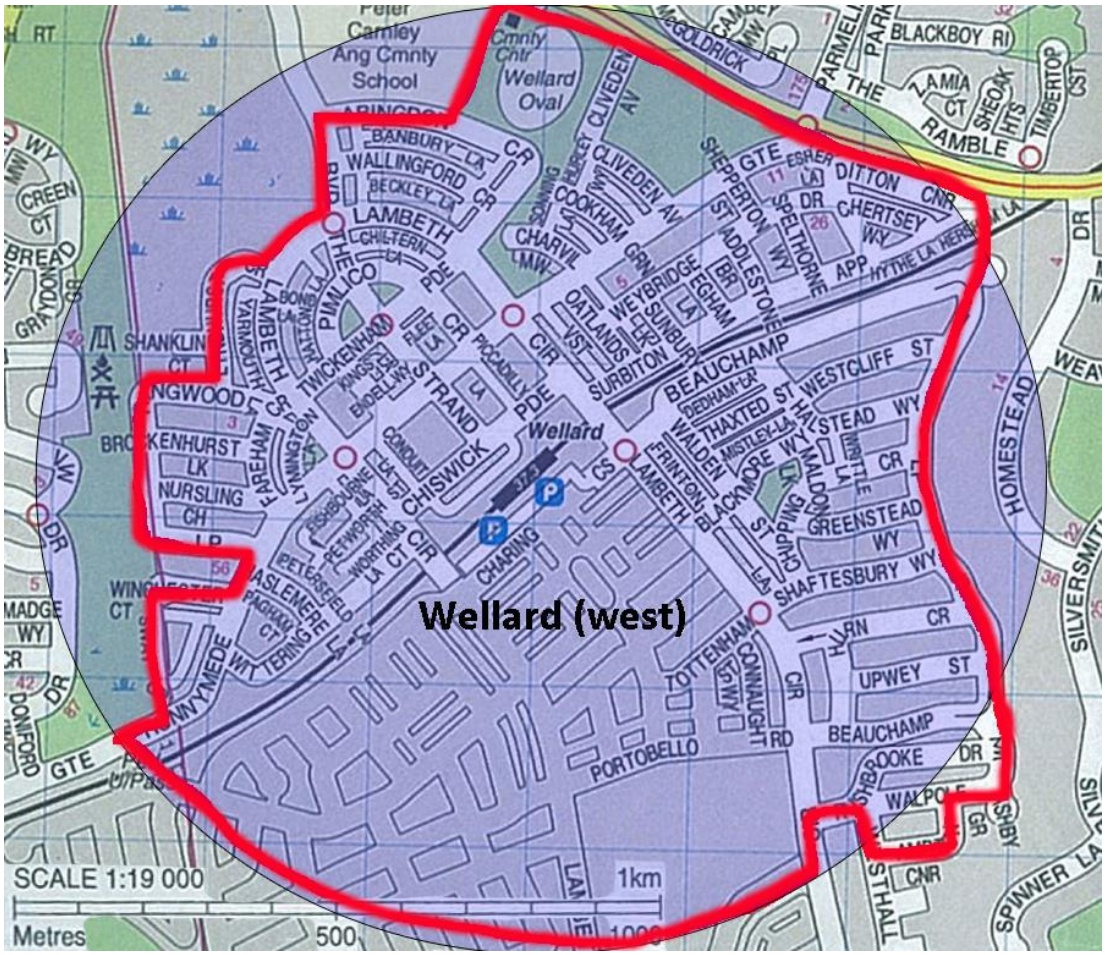


Figure 8.7: Wellard Station activity centre map. Purple circle indicates 800 meters; however, the red line presents the extent of data collection for the research. (Prepared by the author)

B. Planning proposal for Wellard TOD development

Wellard Station has been operational on the southern (Mandurah) train line since December 2007 (Pemble, 2007) and was followed by the development of Wellard Village around a newly constructed train station, south of city of Kwinana. As mentioned earlier in Chapter Four (Figure 4.13), Wellard is a TOD based on walking. It has developed a new community immediate to the new train station and was nominated as a 'neighbourhood centre', a village style centre (320-hectare) with residential density between R 40 to R 80 within 400 meters of the station (Figure 8.8) (City of Kwinana, accessed 2018).

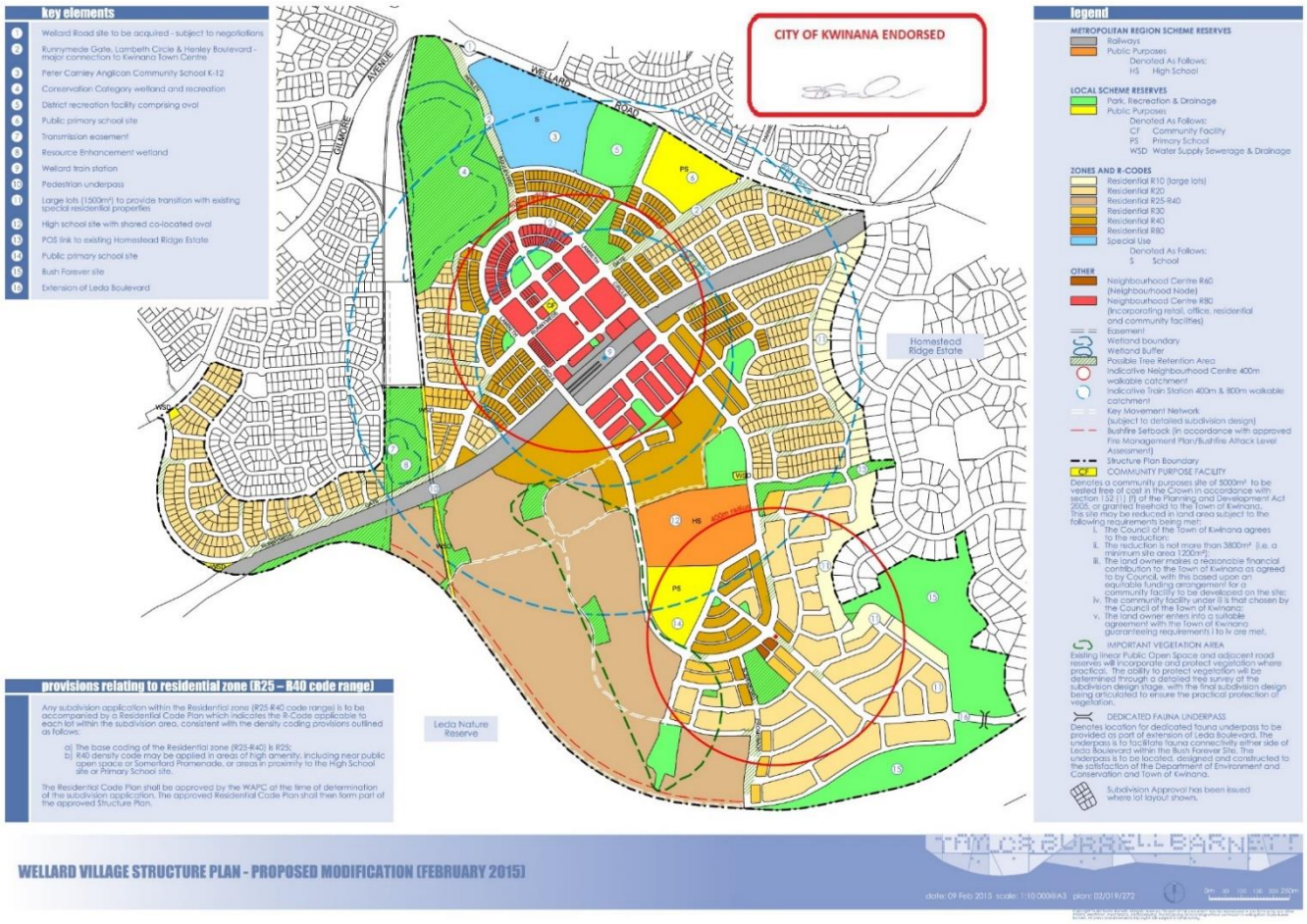


Figure 8.8: Modified Wellard Village structure plan in 2015 (City of Kwinana, accessed 2018)

Although Wellard has been developed substantially since 2007, it is still under development a decade after its station opening. In 2018, the author visited the site again to see the new changes. While a few major commercial sites are still under development (Figure 8.9), the diversity of housing has increased since 2007 by construction of a few medium density low-rise apartment complexes.

The following images (Figures 8.10 to 8.20) illustrate the current status of the area. It is worth noting that the WA economy has declined dramatically in the last decade, and 'unemployment in Western Australia hit 6.9 per cent in November, the highest level since 2002' (Wynne, 2017).

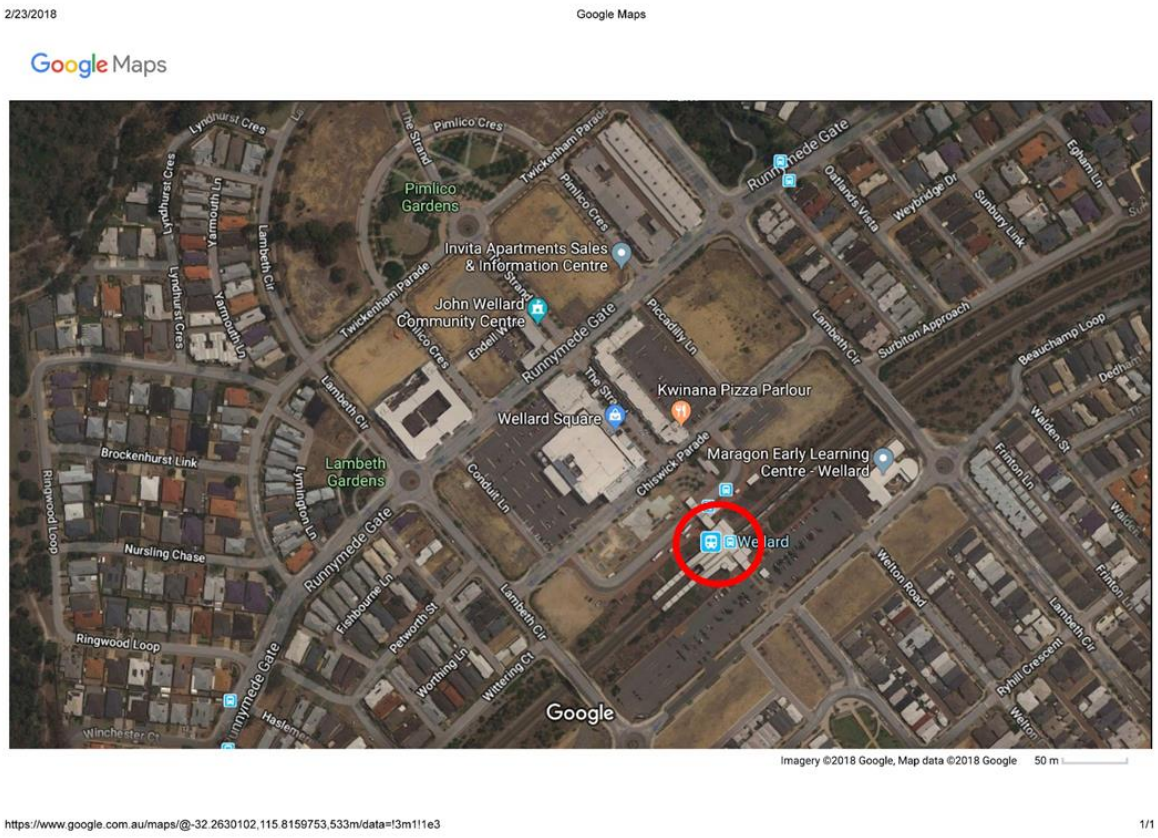


Figure 8.9: Wellard Station and its surrounding development map at Feb 2018. (source: google map)

Figure 8.10 (left): Wellard Station on the right with bus stops at its entrance (source: taken by the author in 2018)

Figure 8.11 (right): Temporary use of unbuilt site on the right as a car park by train passengers (source: taken by the author in 2018)

Figure 8.12: Woolworth 3-hour parking at the back (source, taken by the author, 2018)

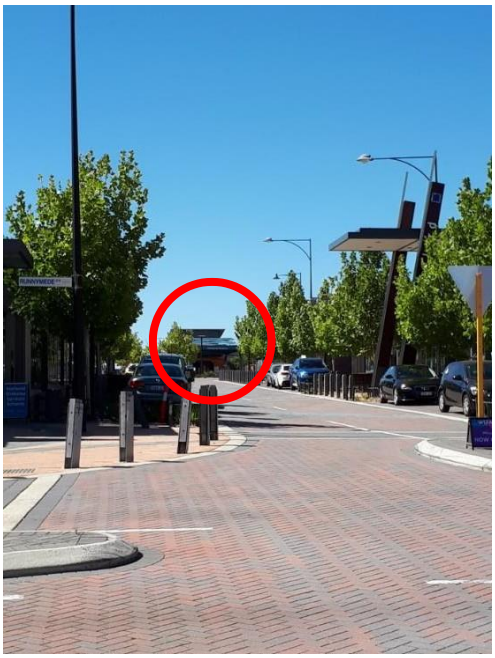


Figure 8.13(right): View of The Strand street and the station entrance at the back (source: taken by the author, 2018)

Figure 8.14 (left): Community centre on The Strand street (source: taken by the author, 2018)

Figure 8.15: detached double storey dwellings within 400 metres of the station (source: taken by the author, 2018)

Figure 8.16: Three-storey apartment complex behind the Woolworths parking (source: taken by the author, 2018)

Figure 8.17 (left): Terrace houses.
Figure 8.18 (right): Back lanes and garages (source: taken by the author, 2018)

Figure 8.19 (left): double strorey detached housing and the streetscape (source: taken by the author, 2018)
Figure 8.20 (right): a commerical streetscape (source: taken by the author, 2018)

C. Questionnaires results for Wellard:

The survey questionnaires, as mentioned in previous chapters, were designed and developed according to the study objectives. Initial questions were mainly about the demographic characteristics of the respondents. They were followed by questions about preferred dwelling types and neighbourhood features. Like the previous case studies results of this case study cannot be statistically substantiated due to the small number of respondents (low power of statistical test. However, its results are in line with the more powerful and rigorously substantiated aggregate results in chapter nine.

C.1 Demographic profile of respondents

Survey results indicate that the dominant age cohort of respondents from this area is the middle age bracket (35–55 year olds, 39.62%) and the most common household structure is couples without children with almost 40% (39.62%). More than 62% of households have 2 people or less (couples without children and persons living alone) while 34% of respondents are families with dependents (couples with children, single parents with children and group households of family members).

Almost 80% (79.24%) of respondents own their property (with or without a mortgage) while 16.9% are renting. While 22.64% of respondents are earning over 120K annually and are in a high income bracket, almost 51% are in a middle income bracket (40k-120k). The percentage of low income earners is similar to high income earners (22.6%). A high percentage of respondents (92.45%) live in low density housing (detached house, single storey villa/unit) and just 5.6% live in medium density (townhouses/terrace). As the area is newly built, most of respondents (84.9%) have lived in their current house for less than 5 years, and only 11.32% have lived in their current homes between 5 to 10 years.

C.2 Current character of the area:

The next section of the survey aimed to identify the most-liked and least-liked characteristics of the area. The most-liked characteristics were categorised in six groups: being close to city, close to public transport, close to amenities, close to family and friends, having special environmental or landscape character and social character (Figure, 8.21). More than 70% of respondents stated that 'being close to public transport' is the most-liked characteristic of the area, while being surrounded by native bushlands is the second most-liked characteristic. At the time of the survey, the plaza and shops were not yet built, therefore being 'close to amenities' was rated low.

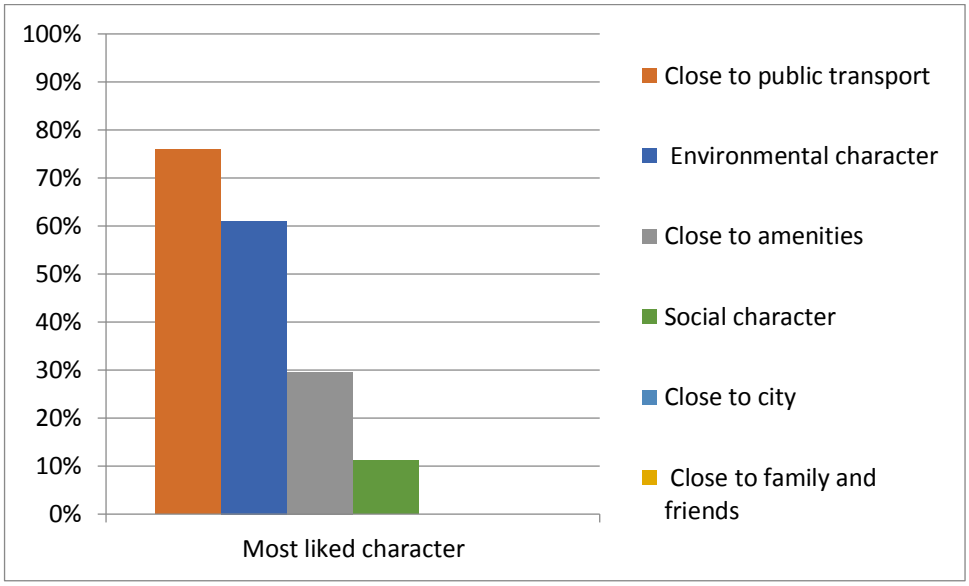


Figure 8.21: The most liked character of the area (n=53)

Respondents report that they like the area as it is 'close to public transport', it is 'quiet and modern', 'close to main transport routes (rail and freeway)' and also 'close to native bushlands'. Being a new affordable area in a rural setting with easy access to the train station were major attractive features described by respondents.

Comments for the least-liked characteristics of the area were categorised in three groups. The first group of comments reflect the area's economic issues, and remark on aspects such as housing affordability, housing size, and

property price etc. The second group highlights issues associated with the environment and amenities, such as the lack of services like retail and cafes within walking distance, heavy traffic, high levels of noise, lack of parking, and lack of trees, etc. The third group of comments reflect social issues in the area such as respondents' fear of crime, concern that there is not sufficient security, and the presence of frequent anti-social behaviour including neighbours' disturbances etc.

While housing price is not an issue in the Wellard area, more than 44% of respondents were concerned about social issues and 42% with amenities issues. Residents expressed their concerns with social issues such as 'crime', 'hoons', 'bogans', 'low socio-economic residents', 'loud parties/music', 'graffiti' and 'anti-social behaviour'. They were also unhappy with the lack of amenities, such as local shops, post office, supermarket, doctors, pharmacies and cafes within walking distance. However, since the survey in 2012, a few new shops such as a Woolworths supermarket, a pharmacy and a café have been opened in 2014, almost 7 years after opening of the station (Wellard Newsletter).

C.3 *Desired dense* neighbourhood features

Further questions were asked in order to study respondents' opinions about features of dense developments in their neighbourhood and housing, which include physical and social aspects.

- **Neighbourhood features**

Of the features presented in the questionnaires, the physical features of 'different architecture styles within the precinct' and 'availability of different housing types in the precinct', along with the social feature of having 'a diverse mix of people in the precinct' were perceived as unpopular features (Figure 8.22). In expressing the reasons for their dislike, respondents reported preferring a 'harmonious' detached house look in their neighbourhood, rather than other architectural styles that 'endanger the sense of character in the precinct', 'look messy' and are in 'contrast' with the

area. They were also not in favour of having ‘a diverse mix of people in the precinct’.

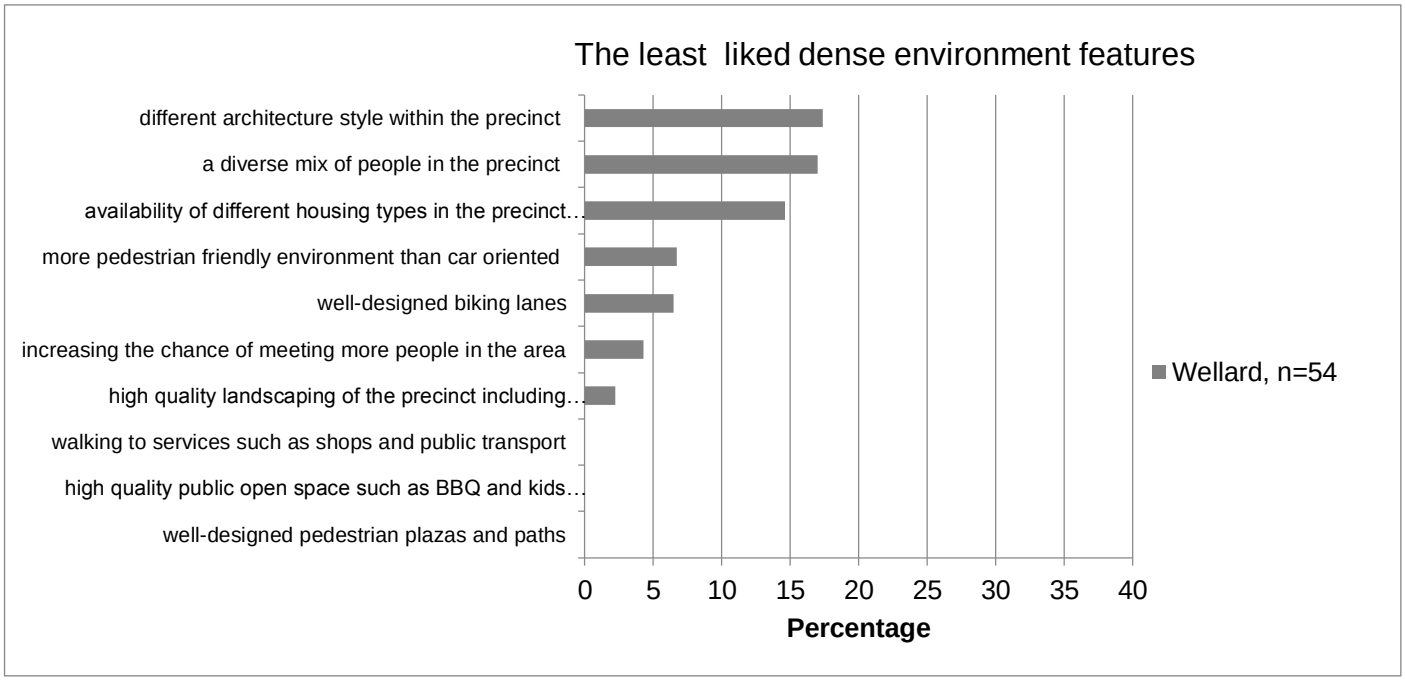


Figure 8.22: The least liked features of a dense neighbourhood, (n=54).

Concerns were mainly about the possible increase in ‘crime’. Some respondents also linked ‘diversity’ to ‘different cultures’ and ‘diverse socio-economic’ residents which they perceived may cause ‘more harm than good’. In explaining their reasons for disagreeing with having an ‘availability of different housing types’, a few respondents revealed that they think of ‘apartments’ as a housing type that does not fit into their area and could cause ‘social problems’. It is only in Wellard, that both physical and social features were identified as the least-liked features of a dense neighbourhood in contrast to previous case studies. However, the respondents who explained the reasons for their concerns further linked the built form feature to a social feature, for instance saying that ‘high density housing increases social problems’.

- **Housing features**

As discussed earlier, the type of dwelling to be lived in, plays an important role in perceiving a dense neighbourhood as desirable. The following graph

(Figure 8.23) shows that respondents in the Wellard area are in favour of living in a low density dwelling type, such as single or double storey detached house (almost 40%). However, 47% out of 87% of respondents who live in detached housing, indicate that they actually prefer other housing options for living. More than half of the respondents prefer medium-density housing such as a grouped dwelling (35.4%) and 2-3 storey town houses (22.6%). Thus in Wellard, far from the city, the medium-density housing dwelling type is more in demand than low-density housing.

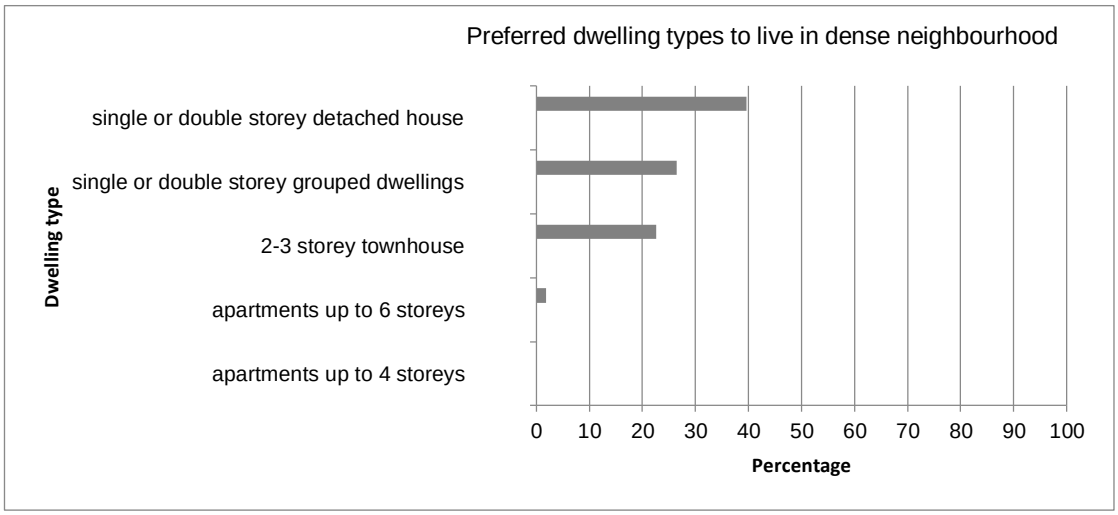


Figure 8.23: Preferred dwelling type for living, n=48.

Furthermore, the following graph (Figure 8.24) indicates that medium density housing is more popular among young age and retirement age groups compared to the middle age group. Households with 2 people or more are in favour of low-density housing rather than medium-density housing (Figure 8.25). The interesting point is that high income earners prefer medium-density housing to low-density housing, and high-density is not selected at all by any income group even low-income earners (Figure 8.26).

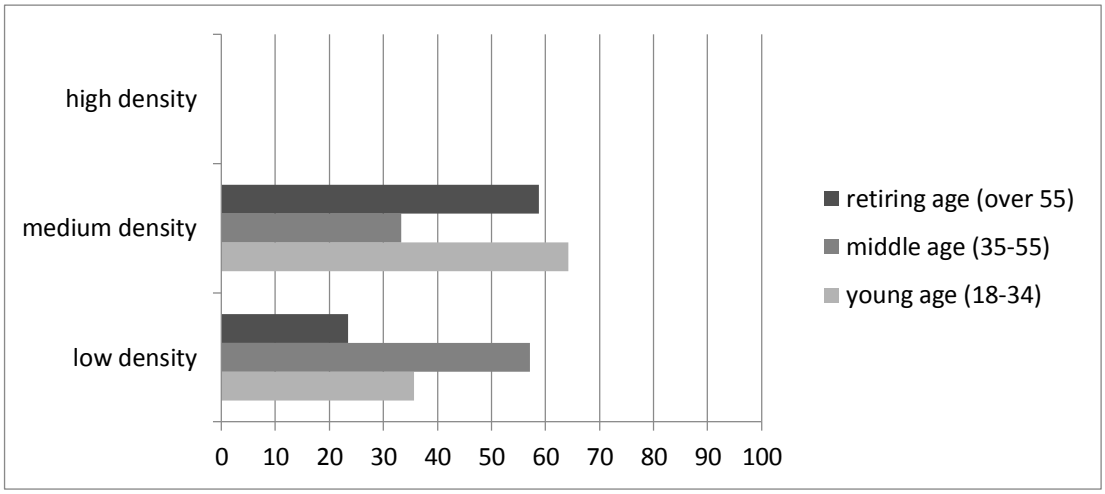


Figure 8.24: Age and preferred dwelling type, (retiring age, n=17; middle age, n=21; young age, n=14).

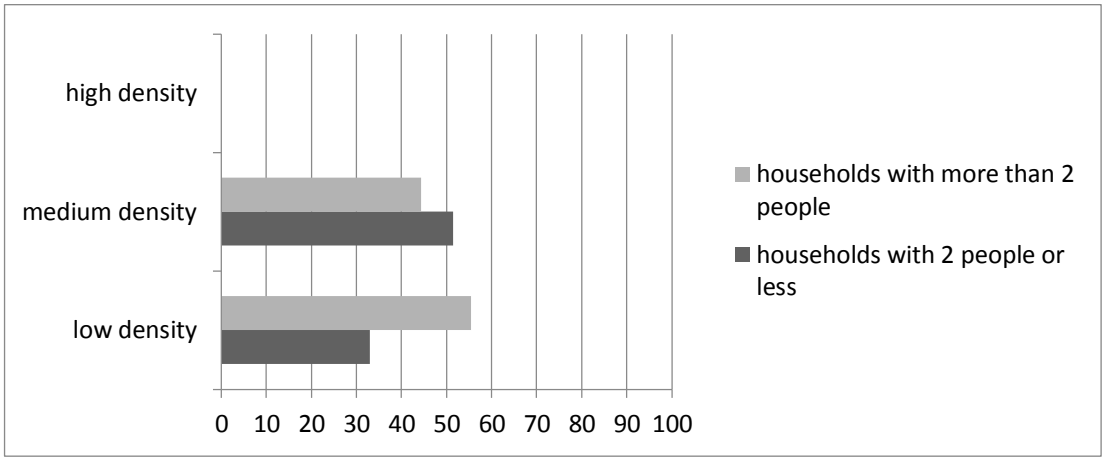


Figure 8.25: Household structure and preferred dwelling type, households with 2 people or less, n=33; households with more than 2 people, n=19).

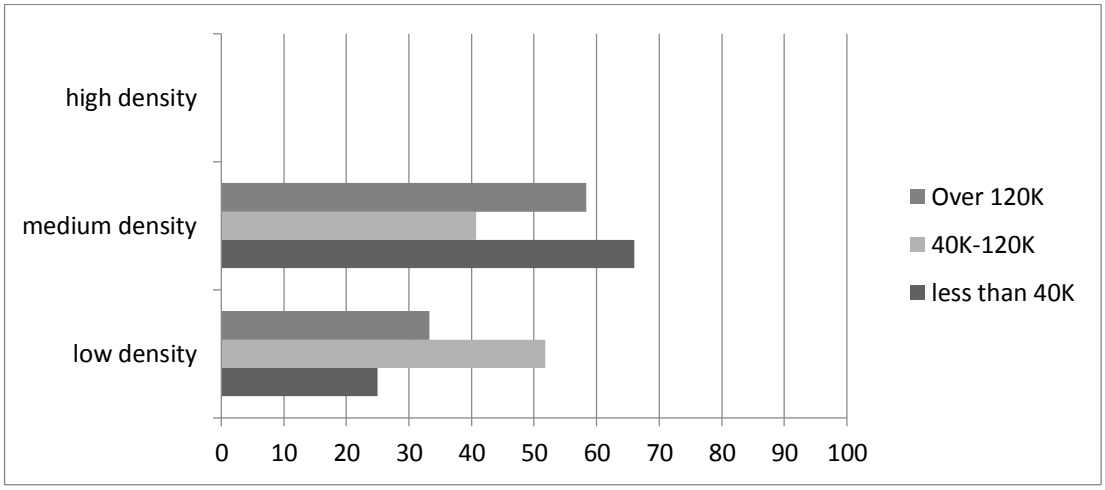


Figure 8.26: Income and preferred dwelling type, high income, n=12; middle income, n=27; low income, n=12).

Hence, medium-density dwelling is an option that can be appealing to various age, household and income groups. Respondents' opinions reflect that smaller dwellings are a desired option for future dense living. They call it a 'best compromise' which allows 'for a sense of community, while retaining territorial independence'. For some, such housing provides 'good privacy' and 'good security', and 'they look trendy, not some big ugly block of floors'. Other respondents hold similar opinions, that medium-density housing is 'a compact home but still feels you have your own space and have some sort of buffer between you and your neighbour'.

As part of investigating respondents' perception of future dense living, the next question was asked in order to study respondents' dwelling preference at neighbourhood scale. The results (Figure 8.26) indicate that 2-3 storey townhouses (34%) are the most favourable choice compared to grouped dwellings and apartments, while a detached house is still the second most preferred. Some respondents pointed out that 2-3 storey townhouse 'are modern', 'smaller versions of a two-storey dwelling', 'suitable for more people but still have some space, privacy, yard', 'looks attractive' and 'doesn't look as crowded'.

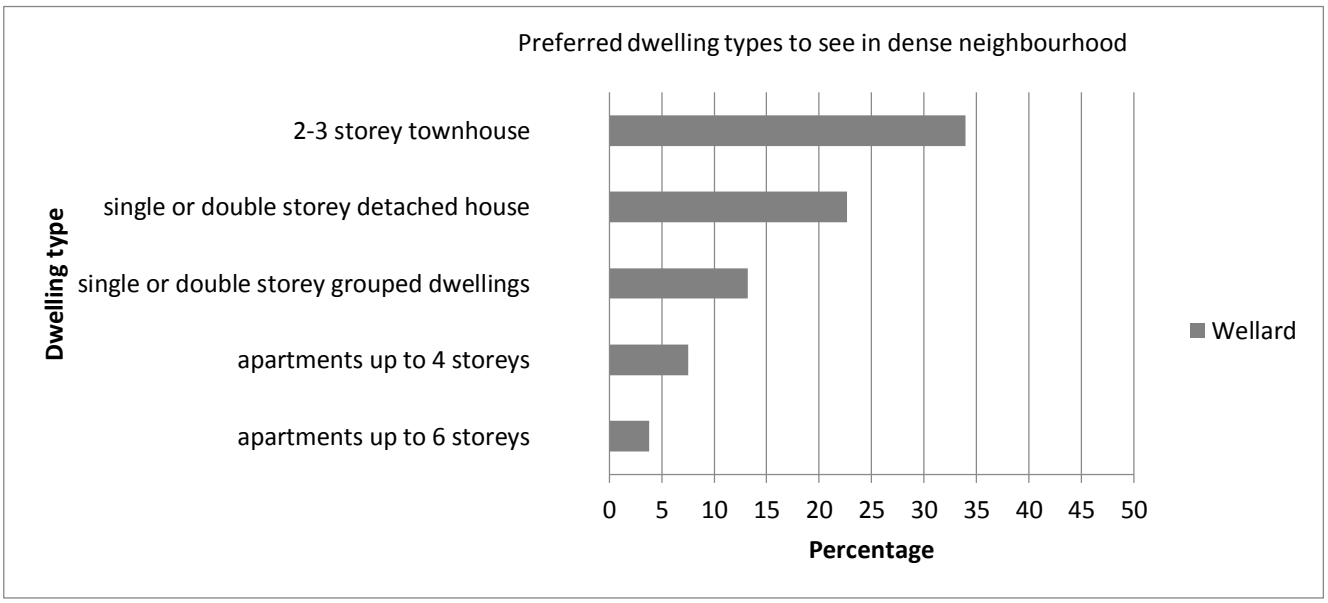


Figure 8.27: Preferred dwelling types to see around the neighbourhood (n=43).

Summary of chapter:

Wellard Village, a new TOD outer-ring development, with middle-income respondents was the last case study. It was assumed that distance from CBD and being a newly designed and built area according to TOD principles may have influenced residents' perception. Moreover, whether the desirable density features of respondents of a newly built TOD area is different of the two established areas. It is evident that respondents' opinions are not dramatically different from the other case studies. Apparently, medium-density is a 'desired' option for choosing a house in a dense environment, and also a preferred form of any development in the neighbourhood. Apartments remain unpopular, while 2-3 storey terrace or town houses are well-received as the preferred type of housing in a dense neighbourhood (physical feature). They are described as a comfortable and modern choice to keep the balance between current lifestyles and dense living requirements. The features of a dense neighbourhood considered unpopular are similar to the other case studies, in that the social feature of diversity is not perceived as a benefit and similar reasons for this are expressed.

CHAPTER 9

TODs as *Desirable Dense* Neighbourhoods

The three previous chapters discuss each of the case study survey outcomes separately. This chapter compares the case study results. The aim is to investigate whether distance from the CBD and demographic characteristics matter in forming negative views towards densification and in choosing dense living preferences.

Introduction:

As previously discussed; the initial questions in the questionnaires investigated attitudes to the current character of the area. Further questions targeted residents' perception of preferred dense development, both physical and social features, in three areas. They also reflect the extent of community's trade-offs between housing, location and lifestyle. In order to understand the cultural characteristics of the areas, some questions in the survey asked residents to explain, in a few words, the reasons behind their choices. Their words have been used as qualitative data to support certain results that emerged from the quantitative part.

A. *Desirable dense* neighbourhood features

In order to investigate the *desired dense* neighbourhood features, a few questions were designed to study respondents' preferences for various neighbourhood and housing features. For neighbourhood features two questions were asked, one concerning general 'physical and social neighbourhood features' and the other concerning 'preferred dwelling type development'. In the case of housing features, one question asked about the features that affect 'comfortable living inside a house or complex' and the other asked about respondents' 'dwelling type preference' for living in a dense area.

A.1 Neighbourhood features

Following the literature review, the key dense neighbourhood features that influence perception were identified and evaluated by respondents, and then presented in Figure 9.1[34].

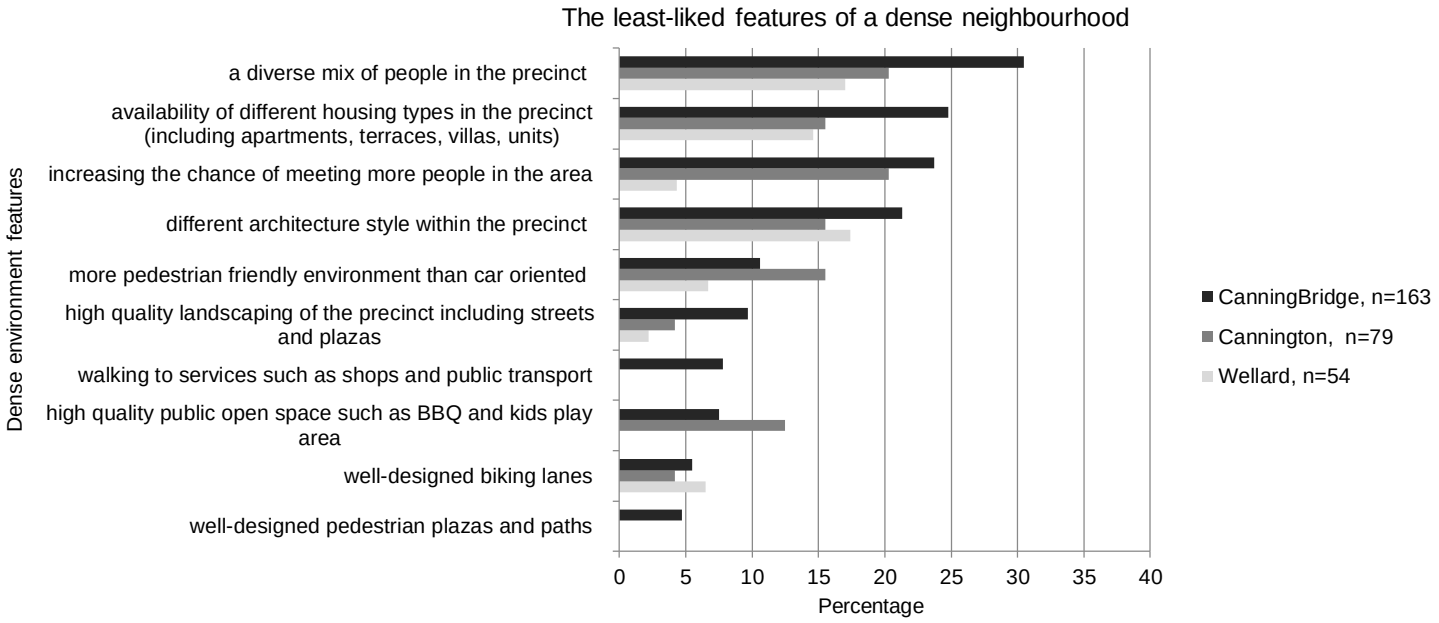


Figure 9.1: The least preferred features of a dense neighbourhood

[34] The statistical confidence that having a 'diverse mix of people' is among the four least preferred features is 95 per cent in Canning Bridge, 70 per cent in Cannington and 95 per cent in Wellard.

Figure 9.1 indicates that, in the Canning Bridge area, which has the highest socio-economic indicators, having a ‘diverse mix of people’, ‘different housing types’ and ‘increasing the chance of meeting more people’ are the most undesired features of a dense neighbourhood.[i] Even in Cannington, a middle-income class and culturally diverse area, having a ‘diverse mix of people’ in the area and ‘increasing the chance of meeting more people’ are also the least-desired features. In Wellard, a middle-income area and the new TOD development area, having a ‘diverse mix of people’ and ‘different architecture style within the precinct’ prove to be the most unpopular features. The resulting comparison reveals that the social feature of a dense neighbourhood, comprising a ‘diverse mix of people’, is the least popular feature among all case studies. Regardless of case study location and demographic characteristics, having a ‘diverse mix of people’ has negatively impacted respondents’ perception.

From the written comments in the questionnaires from Canning Bridge, affluent residents do not appear to have any inclination to mingle, except with similar income-level individuals. Income is the single best predictor of opposition, and affluent residents tend to be less welcoming (Dear, 1992). Rice (2009) also refers to some Melbourne neighbourhoods where residents wish to protect their home from challenging impacts such as living closer to new or different people. This may reflect a desire to control interactions with others by choosing with whom to socialise rather than enjoying spontaneous interactions (Rice, 2009). Similar reasons are embedded in residents’ survey responses for Canning Bridge, Cannington and Wellard, when outlining their reasons behind their resistance to higher density housing. High-density accommodation is related to ‘rental properties which, it is believed, might 'boganise'[35] the area’. A multi-cultural characteristic of a neighbourhood is perceived as likely to ‘increase crime rates’. These are a few among many responses that are advanced to explain an individual’s resistance to higher density housing, and are particularly evident in responses that reveal the

35 person who takes little pride in his appearance, spends his days slacking and drinking beer.

most unpopular feature, that of having ‘a diverse mix of people in the precinct’.

It is apparent from residents’ responses, that ‘increasing the chance of meeting more people in the area’ is seen as another undesirable outcome of increasing housing density. A similar result is evident for Wellard where reasons such as crime and anti-social behaviour are associated with this opposition.

Figure 9.2 Images of dwelling types used in the questionnaires.

Conversely, physical features of the neighbourhood such as landscaping, public open space, bike lanes and parks emerge as common ‘desired’ features of higher density development. The responses also indicate that well-designed footpaths, unobstructed by parked cars and protected by trees, and landscaped roads with well-designed and safe bike lanes are factors that encourage residents to make better use of the public spaces of their neighbourhood, enhancing social interactions.

While enhancing the appearance of a neighbourhood is perceived positively by the most respondents, the unforeseen social outcomes of development are perceived unfavourably.

- **Dwelling type development**

Both the appearance and the kind of built form in a dense environment affect residents’ perception. In order to gauge why people desire, or do not desire,

certain aspects of higher density housing, the preferred dwelling types in their neighbourhood have also been studied. Accordingly, the questionnaire asked what kind of dwelling type the residents would prefer to **see** in the area and to explain in few words why, in case higher density future development occurs.

As previously stated, residents were asked to conceptualise future dense neighbourhoods where their existing homes were located. The housing options were provided alongside an illustration in a survey question (Figure 9.2) [36]. To simplify the graphs, three levels of density were categorized, based on dwelling types. 'Low density' is understood to comprise single or double storey detached houses, 'medium-density' covered 2-3 storey town houses and single or double storey grouped dwellings, while the 'high density' category incorporated apartments of 4 storeys and above. As Figure 9.3 indicates, in all three case studies, medium-density is more popular than both low-density detached housing and high density apartments[37].

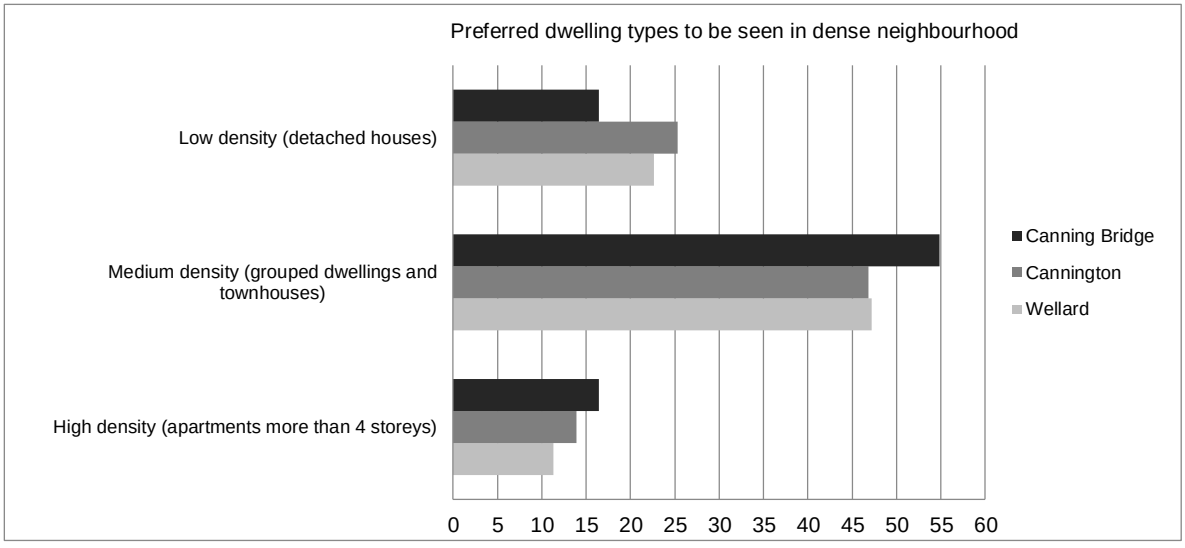


Figure 9.3: Preferred dwelling types to be seen in dense neighbourhoods, Canning bridge, n=144; Cannington, n=68; Wellard, n=43)

[36] In order to avoid any bias in selecting the preferred dwelling/housing type, black and white images were used. Images are from Residential Density & Housing Examples document (Department for planning and infrastructure, 2004).

[37] The statistical confidence that medium-density is more preferred to be seen than low density in dense neighbourhoods is about 100% for all three case studies.

Both social and physical characteristics are intertwined among the reasons given for choosing medium-density dwelling types as a desired or preferred option for a dense neighbourhood. Some residents view medium-density options as a balance between preserving their privacy and forging a sense of community.

Compact, low maintenance dwellings with small gardens are perceived to be suitable for a range of different households and ages, and are considered more complementary to the current type of architectural style of the suburb. In the survey, some residents' written responses also indicate a belief that medium-density built forms are more likely to have the characteristic of being owner-occupied dwellings. Social and cultural meanings associated with medium-density dwelling types appear to be constrained, not only by the appearance and the form of housing, but also by the expected social impacts of this form of development as a balanced choice in building their future dense neighbourhood.

A.2 Housing features

After examining attitudes towards *desirable dense* neighbourhoods, the focus of the questionnaires shifted to identifying housing features that were considered to make a comfortable living place for residents. To understand why people desire, or do not desire, certain aspects of living in high-density dwelling types, home features and preferred dwelling type have been evaluated.

- **Home features**

This section focuses on the housing features which respondents considered could provide a desired level of quality and comfort of living while located in close proximity to other dwellings in a dense environment. Some housing features[38] were identified, and residents asked to respond on a Likert scale

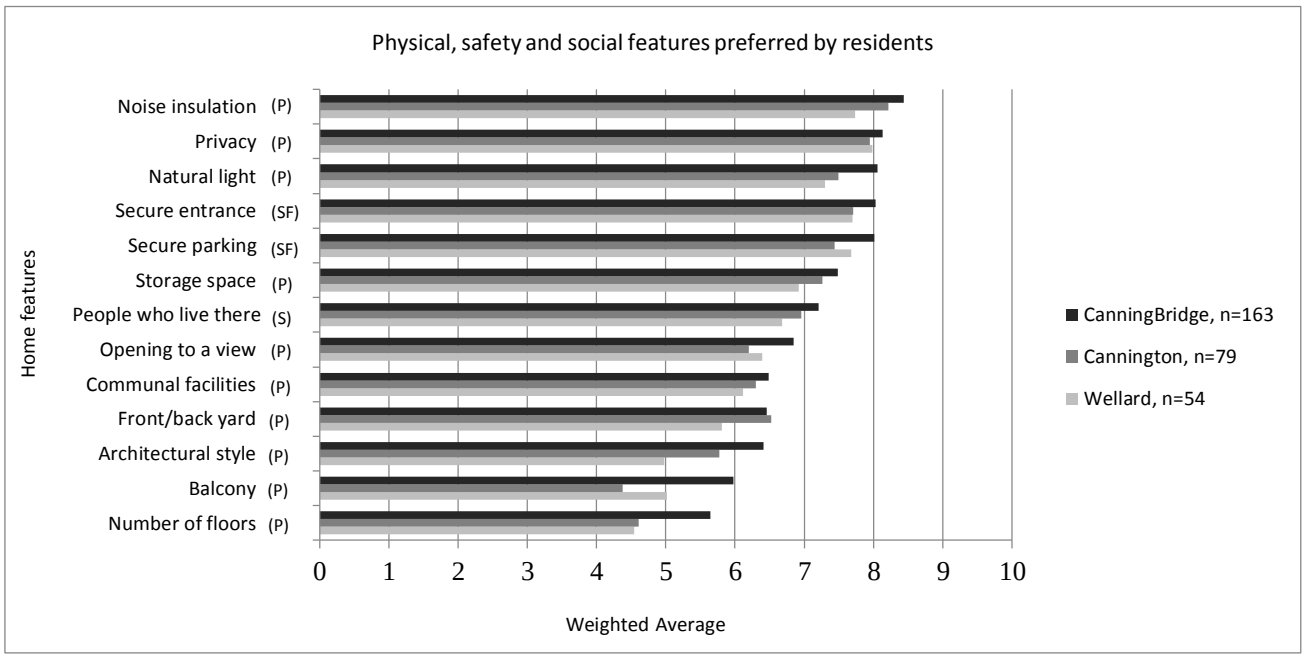
[38] Dwelling features are selected from the Grattan Institute report "The Housing We'd Choose" of June 2011 (Kelly et. al, 2011).

(0=not important, 10=extremely important, Figure 9.4). A weighted score[39] indicates that the following are considered important features in all three case studies:

1. Noise insulation
2. Privacy
3. Natural light
4. Secure parking
5. Secure entrance
6. Storage space
7. People who live there.

Figure 9.4 shows that noise insulation, privacy, natural light and storage space are considered essential aspects associated with notions of a comfortable and secure home in a dense environment. Other aspects such as secure parking, secure entrances and the kind of people who live there are also rated highly, emphasising the point that social considerations form an inseparable part of the perception of *desirable dense* neighbourhoods. These features are also coded based on liveability dimensions (Leby and Hashim, 2010, p.77).

Figure 9.4 Physical, safety and social features preferred by residents (weighted average). (P) refers to physical features/dimension. (SF) refers to safety dimension. (S) refers to social dimension.



[39] Home features scored on a scale from 0 = not important to 10 = extremely important. Sum of the number of respondents times their score divided by the total number of respondents.

Communal facilities, such as open space for children to play in, are identified as one of the less preferred home features in a high-density environment. This may reflect the previously noted resistance that respondents expressed towards engaging with a 'diverse mix of people' or for 'meeting more people in the area' (see Figure 9.1). In other words, an area with high levels of spontaneous social interactions was not perceived as a desirable quality of future high-density development. Disinclination to share communal facilities is also identified in an Australian study by Maynard (2013), in which participants from Perth and Melbourne are understood to be keen to move away from their preferred housing location, simply to maintain the privacy that a 'self-contained dwelling'[40] offers (Maynard, 2013).

- **Housing/ Dwelling type preference for living in a dense area**

The following graph (Figure 9.5)[41] confirms the popularity of 'detached' living in the case study areas. However medium-density dwelling types are the most desired housing option among residents. Two to three storey town houses, and single or double storey grouped dwellings are the most popular options in all the case study areas. Similar findings in a Perth housing study (DOP, 2013) also recommend semi-detached houses (3 bedrooms, 2 bathrooms) as the preferred dwelling type for people who could not afford a detached dwelling in their desired residential location.

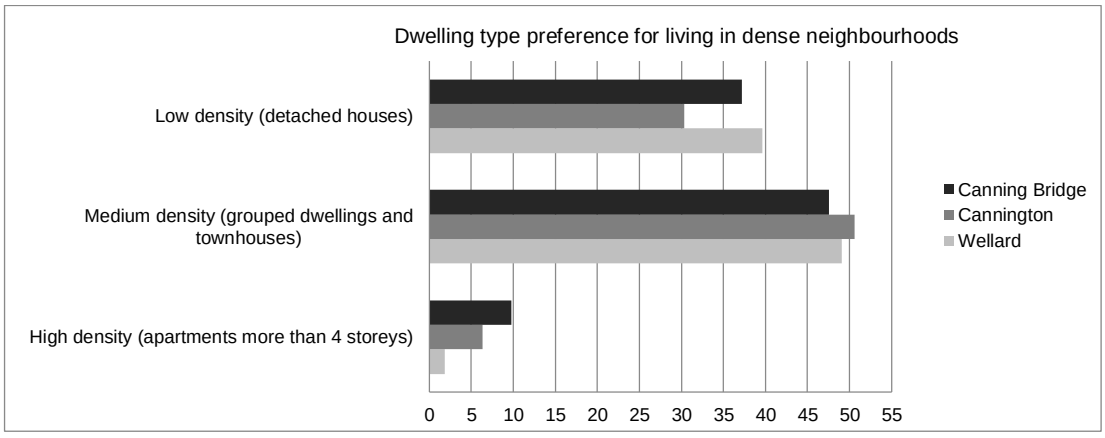


Figure 9.5: Dwelling type preference for living in dense neighbourhoods, Canning Bridge, n=155; Cannington, n=69; Wellard, n=48.

[40] A dwelling for which there are no common areas shared with other households
[41] P-value (confidence) for preference of medium density over low density is ~0.003 (99.7%) in Canning Bridge, 0.007 (99.3%) in Cannington and 0.218 (78.2%) in Wellard.

A variety of household characteristics influence residential location decisions, these include age, income, educational attainment, previous tenure (first-time owner vs. former owner), and even the sense, in a household, of belonging to the neighbourhood (Kestens, 2004, as cited in Kesten et al, 2006, p.62). However, in this study, age, income and household structure in terms of whether there are children or not, are considered basic contributing factors in choosing a house and are pursued by way of attitudinal responses.

A.3 Age and housing preference

Some people expect to change their living place as their age increases. However, if a neighbourhood offers various housing choices to its residents, it can provide the opportunity for residents to remain in the same area despite changes to their housing needs over time. Statistical analysis of data using Pearson's Chi-square Test, shows that age is a factor in housing preference with a p-value of ~0.5 percent (significance of 99.5%). In Canning Bridge, of the dominant retirement-age cohort over 55 years of age, 57.1% live in detached houses, while only 26.2% of them *prefer* to live in detached homes (see Figure 9.6). More than half of them (53.6%) identify a preference for medium-density housing when considering their future homes[42]. The housing demands of this age group need particular attention, as the population of this age bracket will increase in the coming decades (Randolph, 2004, ABS, 2008).

[42] Empty nesters" are inclined to downswing from big family homes, and they are happy to leave some responsibility such as maintaining a big garden and a swimming pool (Hamilton & Hamilton, 2006; Sweenery Research, 2006 as cited in Holling&Mckenzie, 2010, p.280).

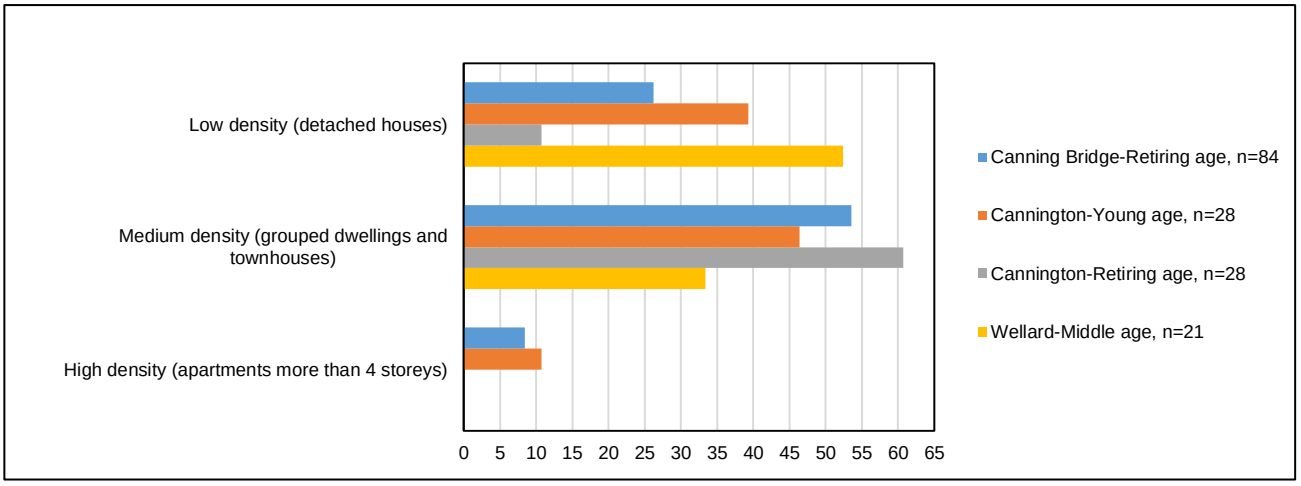


Figure 9.6 Dominant age group housing preference in each case study

The mismatch between existing and preferred housing forms also extends to the other two case studies. In Cannington, 60.7% of the retiring-age respondents currently live in a detached house, but only 10.7% of them state a preference for this dwelling type. While half of this age group chose grouped dwellings as a suitable option, only 28.6% actually live in their preferred dwelling type. There is no significant difference between low and medium-density housing preference in the young age group (18-34 years of age), which is also the dominant age group in the Cannington area. However medium-density housing, closer to the CBD such as at Canning Bridge[43], would seem to be a viable option for this age bracket. In Wellard more than fifty percent of the dominant age group, those of middle age, 35 to 55 years old, consider that low-density housing is the most suitable for their lifestyle (Figure 9.6).

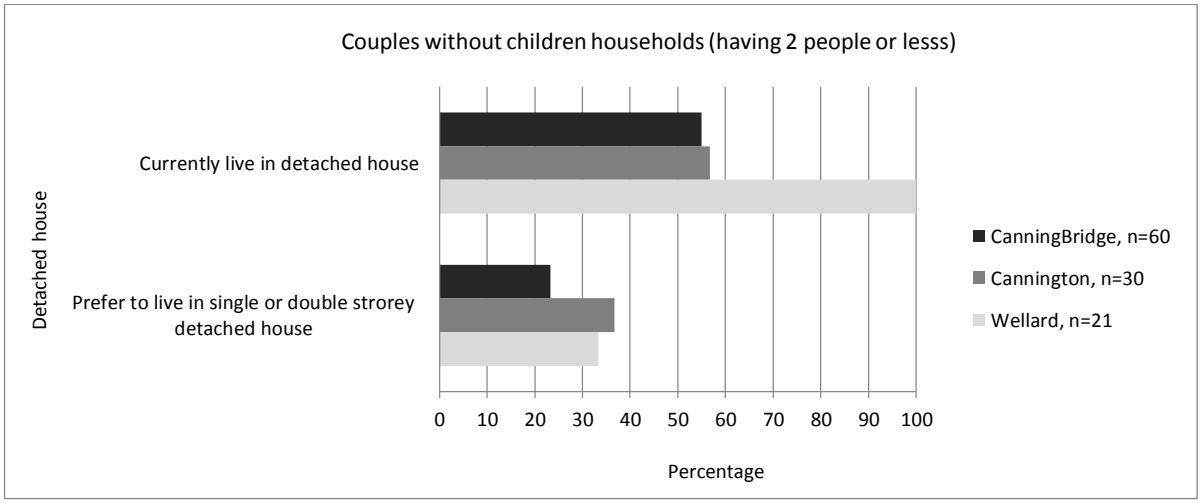
- **Household structure and housing preference**

Household structure or type is another contributing factor in choosing a dwelling and defining a household lifestyle. Statistical analysis of the data using Pearson's Chi-square test[44], shows that household structure is a factor

[43] P-value = 0.049 (confidence of 95.1%) for preferring medium density over low density for young age group in Canning Bridge.
[44] Dalgaard, P. (2008) *Introductory Statistics with R,* New York, Springer Science Business Media, LLC.

in housing preference with a p-value of ~0.3 percent (significance of 99.7%). It is evident from the data results that the category of 'family with children' is not a dominant household structure in any of the case studies, and if the category 'person living alone' is added to 'couple without children' group, then more than 50% of the households in all the case study areas are dominated by households without children, having 2 people or less.

In Perth in 2011, almost 62% of households were without children, 37.9% of households were couples and families without children, and 23.6% were single persons (ABS, 2011a; ABS, 2011b). 'Couples without children', the most significant household type in all three case study areas, expressed a preference for medium density housing. There appears to be a mismatch between the current lifestyle of this household type and the dwelling or housing type they prefer to live in (Figure 9.7)[45]. It is clear that detached housing is not considered an appropriate or desired housing choice for 'couples without children' and 'persons living alone'. According to a Perth housing study (DOP, 2013), 'couples without children' and 'single households' are most likely to trade-off their initial preference for a detached house for a semi-detached house in order to successfully access their preferred residential location. In contrast, 'family with children' households are least likely to be willing to trade-off housing location for housing type (DOP, 2013).



[45] The confidence that more people are living in detached houses than those who prefer to, is ~ 100% (p-value ~ 0).

Figure 9.7 Mismatch in housing supply and demand for couples without children households

Couples without children households have a tendency to prefer medium-density housing to low-density in all the case studies (Figure 9.8)[46]. However, the difference between low and medium-density in Canning Bridge, which is located closer to the CBD, is more significant than in the other case study areas. Apartments, as seen in Figure 9.8, are not a popular housing option to live in for couples without children.

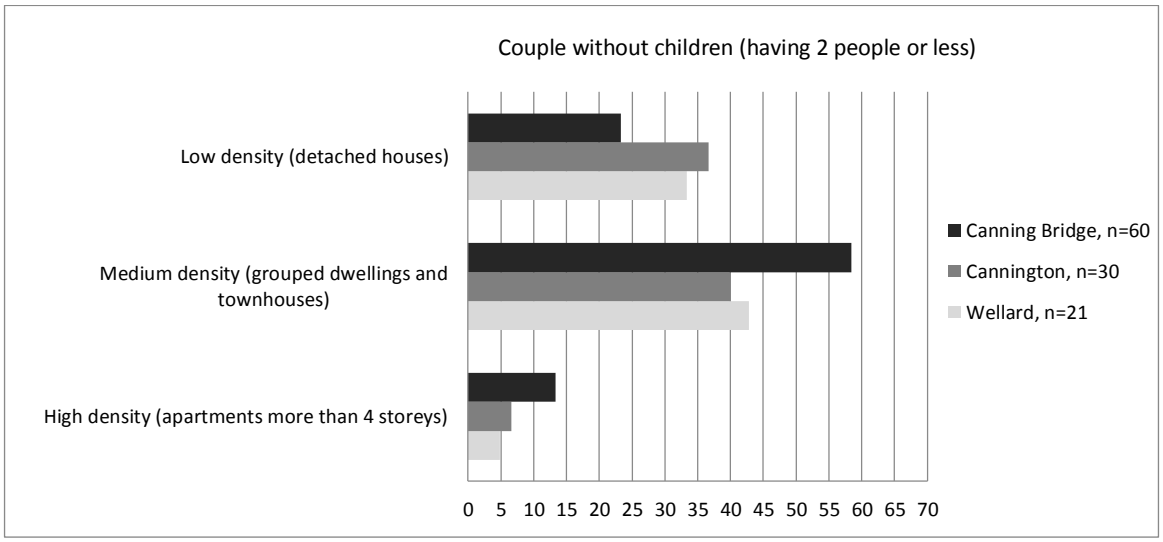


Figure 9.8 Dominant household structure (couples without children) housing preference

A.4 Income and housing preference

Income emerges as a key factor in choosing the house type and its location, and whether to rent or to purchase. Statistical analysis of the data using Pearson's Chi-square Test shows that income is a factor in housing preference with a p-value of ~0 (significance of 100%). In Canning Bridge, the dominant household income is over $120K a year. Almost 61% of this income group currently live in a detached house, and 50.7% express a preference for this form of housing. It is noteworthy that 2-3 storey town houses are the next most-preferred housing or dwelling type for the high income group, accounting for 23.2% of housing preferences.

[46] P-value (confidence) for preference of medium density over low-density housing among couples without children is ~0 (100%) in Canning Bridge, 0.5 (50%) in Cannington and 0.375 (62.5%) in Wellard.

Households earning less than 40K are the most vulnerable groups in society and in the housing market. In all the case study areas, detached housing is not a popular choice for this income group, and medium density is preferred to high-density apartments (Figure 9.9)[47]. In other words, more affordable medium-density housing is a desired option for this income group.

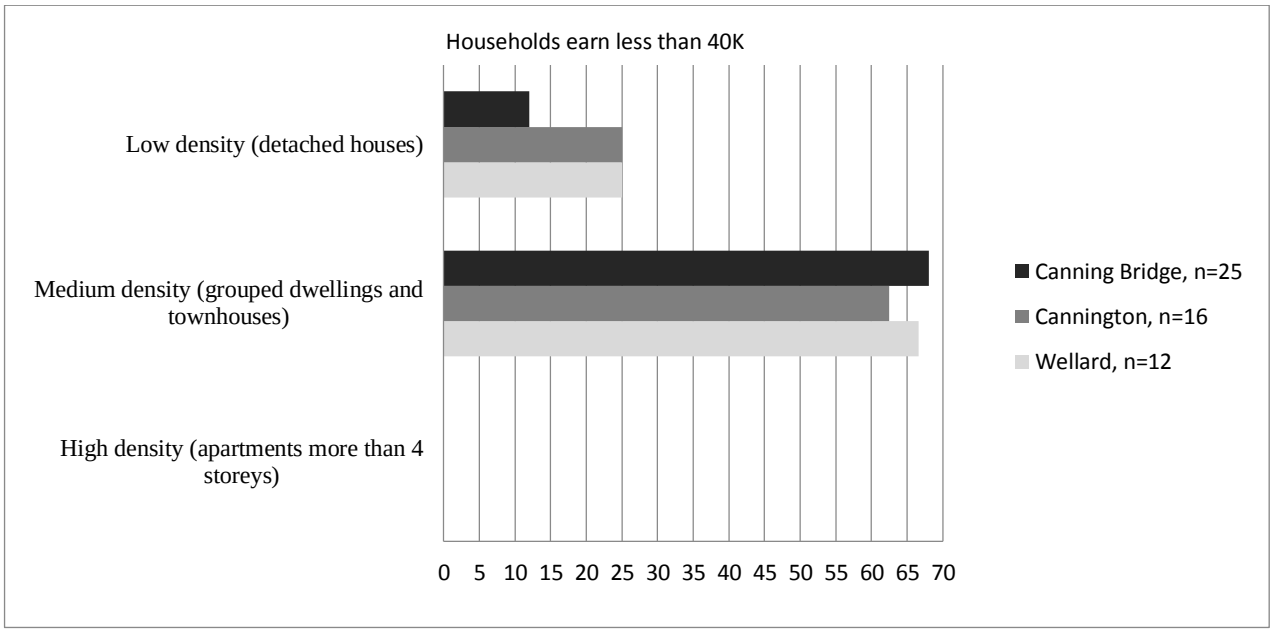


Figure 9.9: Housing preference for households earning less than 40K

The middle-income group (earning 40K-120K) is the dominant income group in Cannington and Wellard (Figure 9.10). However, this income group shows a higher preference for medium-density housing in Cannington than in Wellard[48]. This may indicate that this particular income group (in Canning Bridge and Cannington) prefer smaller houses in their favoured location because location is more important to them than the size of a home.

[47] P-value (confidence) for preference of medium density over low density housing for the group earning less than 40k is ~0 (100%) in Canning Bridge, 0.03 (96%) in Cannington and 0.05 (95%) in Wellard.

[48] P-value (confidence) for preference of medium density over low density housing for the group earning 40 to 120K is ~0 (100%) in Canning Bridge, 0.075 (92.5%) in Cannington and 0.619 (38.1%) in Wellard.

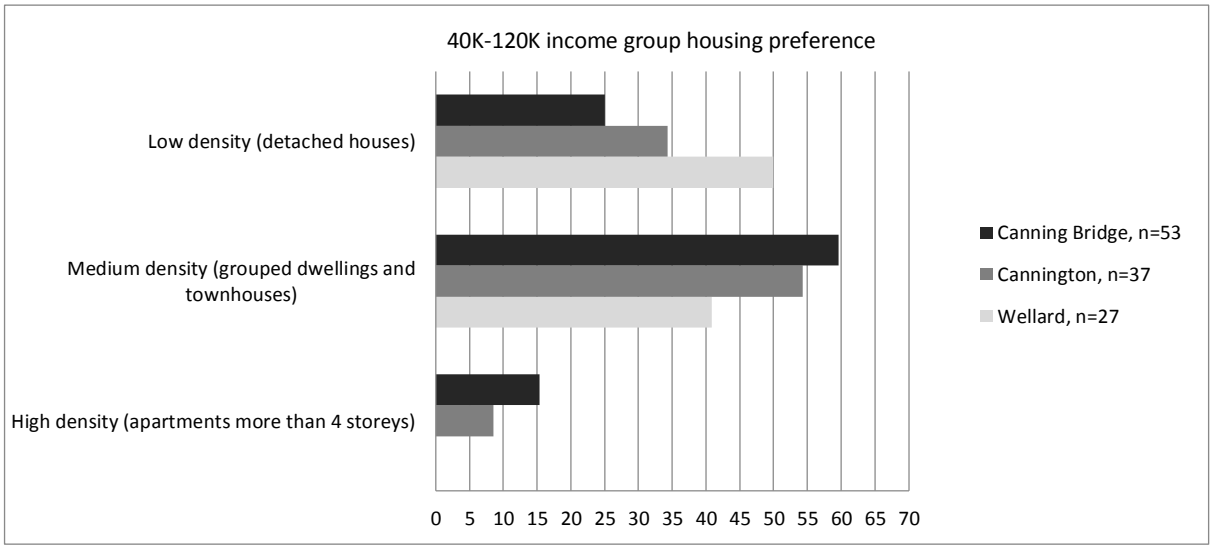


Figure 9.10 40K-120K income group housing preference

Based on a Perth study (DOP, 2013) a middle-income group (which in that study is defined as earning between 40k to 129K a year) can shape the potential market for medium-density housing. According to the study (DOP, 2013) this middle-income group is willing to pay more than 30% of their gross income on mortgage or rental expenses to live in their preferred location. This might supply a rationale to provide affordable medium-size apartments (3 bedrooms, 2 bathrooms) in a medium-rise complex for this income group (defined between 40K to120K) in the proposed redevelopment of the Canning Bridge area. Such apartments can be seen as providing an affordable trade-off between dwelling type and preferred location.

Summary of the chapter

Currently, WAPC has allocated to each designated TOD, a residential density target defined as a 'desirable density' (WAPC, 2010). This raises the question as to whether the designated density target coincides with the residents' 'desirable density'. Residents' preferred neighbourhood and housing features have been studied to find the desired features of a dense neighbourhood. Among neighbourhood features, both physical and social, having 'a diverse mix of people', or social diversity, is perceived as the least-liked feature among all case studies. It is the *socio-psychological factor* that influences the way people perceive an environment as undesirable.

Figure 9.1 illustrates that social diversity is the most undesirable feature in the Canning Bridge area. In the Cannington area, social diversity and the increased chance of socialisation (social features) are considered to be the least-liked features of a dense neighbourhood. In Wellard, respondents' opinions of a newly built TOD area is not different to other respondents of established areas and social diversity (social feature) and diversity in architecture styles or built forms (physical features) are considered the least-wanted features. However, as discussed in the previous chapter, in describing the reasons for the unpopularity of *diversity in built forms* in the Wellard case study, respondents' comments made certain links, for instance connecting the presence of apartments to 'social problems'. Social diversity, identified most frequently as the least-liked social feature, is linked to 'crimes', 'anti-social behaviours' and a 'low socio-economic' demographic. It is shown that the likelihood of unknown and unpredictable social encounters in an area of higher density, appear to influence individuals' perceptions of a dense neighbourhood. Therefore, it is evident that social features are common in all case studies for shaping respondents' concerns regarding densification.

The next aspect to consider in studying a 'desired dense' neighbourhood, is the residential built forms. Medium residential density developments are identified as a more popular option to be seen than low and high rise developments in future dense neighbourhoods. However, the question is the extent to which higher density can be achieved through the use of medium-density dwelling types. Residential codes say little about the broad range of densities and the potential mix of dwelling types (Alexander, 1993). Alexander et al. (1993), assert that dense developments can be achieved by providing medium-density housing. In this study Alexander et al explore the relationship between density and the urban form based on changing variables including: unit size, lot size, and block configuration. They conclude that row housing and low-rise garden apartments share the middle densities, with maximum R145 (145 dwelling per hectare) and R111 respectively (Alexander, 1993, p.196).

For living comfortably inside a home, having quality noise insulation, privacy, natural light and storage space are considered the most important features. Preferred housing features for living in a dense area, are also discussed in the case studies, in relation to dominant age, household structure and income. Respondents are seen to be more inclined towards medium-density dwelling types, without any shared spaces, as their desired option. While they are well-aware of the proximity to transport and accessibility to services, they show no preference for living in an apartment complex with shared spaces. It seems that they compromise between density and features such as privacy in their preference for a medium density housing option[49].

[49] From an economic point of view, medium-rise density is a more cost effective option for developers too (Rowley and Phibbs, 2012).

CHAPTER 10

Social Diversity and the *Desirable Dense* Neighbourhood

This chapter discusses the results from the second stage of data collection, the interviews including all case studies. This stage of data collection is qualitative and aimed at exploring the reasons behind the least-liked feature of a dense neighbourhood which has been identified as *diversity. Social diversity* is the socio-psychological factor that negatively influences respondents' perception of a dense neighbourhood.

Introduction

Findings from the questionnaires at the first stage of data collection reveal that having 'a diverse mix of people' is the least preferred feature within a dense neighbourhood. The unpopularity of the feature sheds light on one of the important causes of negative perception towards densification. It seems that respondents link 'diversity' to 'crimes', 'anti-social behaviours', and 'low socio-economic' demographic, as mentioned in the previous chapter, this has demanded further qualitative investigation. This chapter comprises

discussion about data collection procedure, interview analysis and finally the conclusion.

A. Thematic analysis

The interview themes were designed to probe interviewees' perception towards 'diversity in their neighbourhood', and their attitudes towards their current neighbours. The themes also include their inclination towards informal and formal socialising at neighbourhood level, their perception towards new neighbours, and their inclination towards informal socialising at local street events. The themes were extracted from different studies in the literature such as Taylor et al. (1985), Alesina and Ferra (2002), Costa and Kahn (2003), Letki (2008). The same approach was used to analyse the interviews. In the first stage of analysis recorded interviews were transcribed and participants' quotes were categorized based on the five following themes (Figure 10.1). Further the content and meaning of interviewees' responses are analysed.

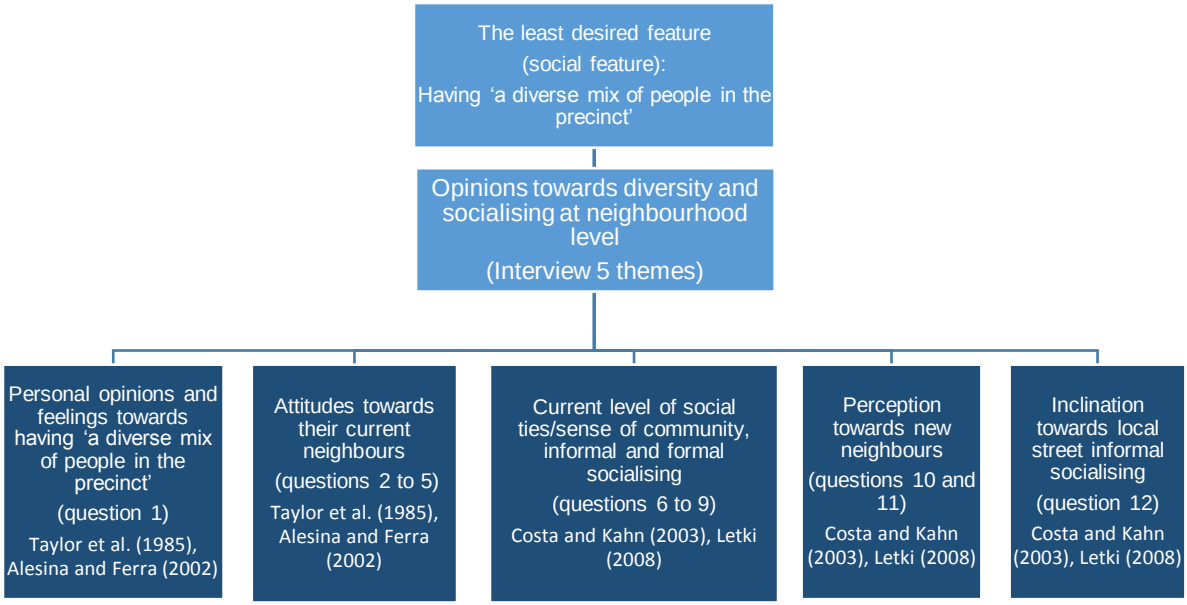


Figure 10.1: Interview themes

Theme 1: Opinions towards 'diversity' in TOD precincts

The first theme in question one was an open-ended question which explored individuals' opinions of social diversity. As mentioned before, respondents in all case studies ranked *having 'a diverse mix of people in the precinct'* the least desired feature. Therefore, in the first question, interviewee's personal opinions and feelings towards negative perceptions of 'diversity' were explored.

More than half of the interviewees (10 out of 17 people) indicate 'fear of the unknown' as a reason, shaping the negative perception towards having diversity in their neighbourhoods. The interviewees (9 out of 17) connect diversity to different cultures while some (2 out of 17) connect it to different socio-economic groups. Overall, interviewees think 'fear of the unknown' which may come from not being familiar with people of different cultural backgrounds or socio- economic background affect their perception of neighbours. Many interviewees indicate that if someone is more involved in environments with diverse people, he or she might be able to overcome this 'fear of unknown'.

> ***Person 1****: They are concerned with* ***the fear of the unknown*** *and they haven't experienced people from other cultures, they're not knowing what those people are like*
>
> ***Person 3****:* ***We tend to fear what we don't know*** *so if I don't know your culture particularly if you look dramatically different so if you happened to* ***dress in a hijab*** *or you happened to have* ***turban on your head*** *or you happened to have* ***a black face*** *or you're happened to be an* ***Asian extraction*** *if I haven't had a lot to do with people from those cultures then I tend to be afraid, particularly with everything we* ***see on TV*** *these days. So we fear the unknown…because they're frightened…because they don't understand because they look different and also people don't want get involved as much as they used to.*

Fear was mentioned as a reason causing negative perception towards diverse people. In the literature, social psychologists also reveal a strong link between contact and the perception of threat and feeling of 'fear', which might result in prejudice (Stephan and Stephan, 1985; Forrest and Dunn, 2011). They also indicate that in the absence of cross-cultural contact people will not have sufficient knowledge to judge an 'out-group' (a group with different cultural background from the host society) as a realistic threat (Stephan and Stephan, 1985; Forrest and Dunn, 2011). Realistic threats are defined as threats to resources such as time, money, and power. Symbolic threats are threats to cherished values or beliefs such as identity (Stephan and Stephan, 1985 cited in Oskamp, 2000; Saucier et al., 2005; Greenland et al., 2012).

Intergroup anxiety in interactions with outgroup members may also cause feelings of threat. During an intergroup interaction there are some expectations that the interaction will not go well. They may feel that during or as a result of the interaction they will be embarrassed (self-anxiety)[50], or be subject to other negative effects on themselves (other-anxiety)[51]. Therefore, they may express negativity toward other groups by avoiding interactions with members of another group (Bizman & Yinon, 2001; Stephan et al., 2002 cited in Sucier et al., 2005, p.14). There is also evidence that the experience of intergroup contact is different for different groups, and threats, stresses, or anxieties that individuals experience are complex phenomena (Greenland et al., 2012, p. 4). For example, the experiences of interracial contacts are different for ethnic majority and ethnic-minority groups.

Members of majority groups are concerned about appearing to be prejudiced, but minorities are concerned about being discriminated against (Shelton and Richeson, 2006 cited in Greenland et al., 2012). Therefore, when people are concerned with diversity, it is evident that their level of contact with people of different socio- economic and cultural backgrounds is not sufficient to

[50] self-anxiety (anxiety over thinking or doing something that is prejudiced) (Greenland et al., 2012)

[51] other-anxiety (anxiety that the other might do something to you) (Greenland et al., 2012). **As person 7 says: '*So they park on the driveway and get nasty. They have one car, but they have constant friends, park on the driveway. They abuse if you ask them to move the car. And this is a sort of thing that we have all the time*'**

overcome their fear, either realistic or symbolic. It is this anxiety which later on affects their attitudes and perception. Although it was stated in the literature that threats are the main contributors to anxiety, for a majority group or the host society, the form of threat perceived and the extent of intolerance or prejudice are also dependent on *Mass media influences* (Forrest and Dunn, 2011)[52] and previous personal experiences. Symbolic threats, and particularly media influence, were also mentioned by the following interviewees.

> ***Person 5****: I think some people like to live in a community of similar people...they don't want diversity might be a little bit more do with fear perception of other cultures, maybe in Australia there is particular fear about other cultures not aligning with their* ***ethical views or aligning with values*** *or what they think is.*
>
> ***Person 11****: I think people don't mix well because they are from* ***different cultures****, they keep to themselves and they only mix with their own culture so if they are two neighbours with two different nationalities or different origins, they will probably say hello and good bye and that is it.*
>
> *…. Because I think they* ***feel intimidated*** *with the different race, they have different ideas about different races and how they've been brought up as well. If they've been brought up that this race is violent or like* ***media*** *put that* ***race is violent*** *so they keep away from these type of people or they may have studied about historic culture that there is problem with this culture.*

[52] Since 2003, Kevin Dunn extensively investigated the issue of prejudice, intolerance and racism in Australian cities. Dunn et al. (2009, p.5) state that **Perth**, which has become an important immigrant receiving city over the past decade or so, is close behind Sydney in some forms of everyday racism experience, such as racist talk and the most severe form of experience, physical attack. Such experiences were much higher for Indigenous Australians than for non-Indigenous respondents, generated a 'threatening environment' (Dunn et. al., 2009, p.2)[52]. Similarly, in a recent Australian publication by Nelson et al. (2018) the discourse of reverse racism was pointed out as growing in the society when white Australians perceiving themselves to be a racially disadvantaged group, with some seeing particular groups, such as Indigenous Australians and asylum seekers, as receiving unfair privileges (Hatchell 2004 cited in Nelson et al., p.340).

The feeling of *anxiety* at having contact with diverse people can be found in some comments which describe those social interactions as a threat to their 'comfort zone'.

> ***Person 14**: I think it [diversity] **threatens** their **comfort zone**, where people like to live surrounded by people of similar cultural background and feel threatened by things which are different.*

> ***Person 13**: I guess for some people they know if they live with people who like them maybe they **feel comfortable**…maybe it is just unknown to them or maybe **they've had experiences in the past** which didn't work.*

The idea of comfort in these responses corresponds to the belief that major factors contribute to the sense of well-being experienced by an individual includes the physical and social conditions of inhibited space (Pineau, 1982). A sense of comfort is attained when an individual feels familiar and at ease in the environment and there is no need to make an effort to work things out (Blokland and Nast, 2014).

It is clear then, that a feeling of losing control, or being out of a familiar 'comfort-zone' while living in close proximity to unknown people, affects perception. To a certain extent, the feeling of being out of a comfort zone can be productive. Panicucci (2007) calls this a 'stretch zone', suggesting it is expandable as individuals learn how to overcome their fear. However if a certain level is passed, the ability to overcome fear deteriorates and becomes in Panicucci's (2007) terms a 'panic zone' (Brown, 2008). Hence, if someone lives in an environment, in this case a dense neighbourhood, in which he or she feels anxious due to unfamiliar neighbours, their sense of security may be threatened and they can become scared, experiencing the panic zone. Whether this threat is realistic or symbolic, it can lead to more intergroup anxiety which results in shaping negative attitudes, prejudice in the majority group and a feeling of being discriminated against in the minority groups.

While some people see *diversity* as a threat to their sense of security and comfort, others have the opposite view. The interviewees who did not have any anxiety in socialising with outgroups, those of different cultures, race and age etc., are those who experience close contact with diverse people either through their work or school environment. Respondents state that having knowledge of, and being familiar with outgroups, can reduce feelings of threat both realistic and symbolic. These responses indicate that interactions among groups can reduce negative stereotyping and intergroup anxiety (Stephan and Stephan, 1985 cited in Oskamp, 2000).

> ***Person 2:*** *When I moved to Perth in 1997 and I moved here from Footscray [Melbourne] I said to myself* ***what a homogenous place****! where is the diversity, I found it very weird and difficult to adjust to have the only different accent to Australian*[53] *being either English or south African, people looked the same, dressed the same I found it very weird."*
>
> ***Person 8:*** *I think you need communities that are diverse because if you've got one group of people, you* ***don't grow, you don't learn****, there is no interaction, I mean I can't fathom why you wouldn't want diversity."*
>
> ***Person 4:*** *Diversity for me is different range of culture and different range of people, I grew up in Melbourne right in the middle of an area where there were a lot of… not many Australians, a lot of Italians and a lot of Greek people, Vietnamese and I loved it. It was* ***an interesting place to grow up*** *and when I was a young person, teenager had lot of friends who were not Australian, and I was the only Australian girl at my school, that was fun and I loved it and I* ***ended up marrying a man who is Spanish*** *and I like people from all different types of area because I think we learn different things.*

[53] In this study Australian means an Anglo white person. It is the description most commonly used by participants in racism studies including a recent study by Nelson et al., (2018, p.346).

As discussed, negative perceptions toward diversity may stem from the threats that people perceive as coming from their social environment; whether the threats are realistic or symbolic they are still the cause of anxiety in social life. If the level of anxiety in social life increases, unrealistic attitudes and prejudice increases in people of the host society while feelings of being discriminated against create negative attitudes in migrant communities (out groups). Ross and Jang (2000) indicate that the presence of fear and mistrust of others represents a profound form of alienation that stems from *a sense of disconnection*. People who do not have a sense of connection to other people of different socio-economic or cultural backgrounds may experience fear, negative perceptions and anxiety in social life.

Theme 2: Attitudes towards current neighbours

The second theme of the interviews, dealt with in questions two to five, concerns individual interviewees' attitudes toward their current neighbours. Out of seventeen interviewees, 9 showed negative attitudes toward some of their neighbours, and 2 of the interviewees did not know their neighbours enough, and were therefore neutral towards them. The remaining 6 interviewees had a positive attitude towards their neighbours (Figure 10.2).

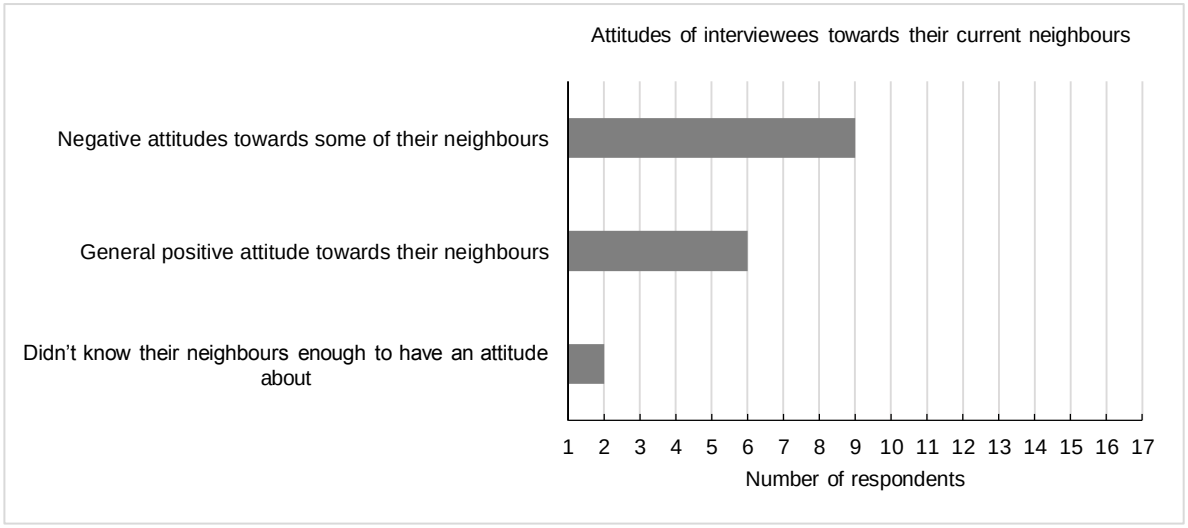


Figure 10.2: Attitudes of interviewees towards their current neighbours

When responding to the questions, each interviewee was also asked to draw a schematic map of his or her dwelling and immediate neighbours. Cognitive maps enable individuals to recall information about their spatial environment (Downs and Stea, 1977, p.6). This tool of sociologists represents a spatial and social environment, and allows a person to process information about its attributes and the people and groups with whom they are in regular contact (Downs and Stea, 1977, p.7)[54].

> The process of cognitive mapping is a means of structuring, **making sense of**, and coping with the complexities of environments external to mind. These include not only the observable physical environment but also the many and **varied social and cultural** environments that impinge on our lives and behaviours. (Stokols & Shumaker, 1981 cited in Golledge, 1987, p.144)

In a dense environment, there are more people living in close physical proximity to one another than there usually are in low-density residential areas. Therefore it is important to develop strategies for the emergence of positive attitudes. Albarracin et al (2005) explain that individuals react to their environment in an evaluative fashion based on their attitudes, an 'attitude' being 'a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour (Eagly, & Chaiken, 1993, cited in Albarracin et al, 2005, p.4). Attitudes also reflect individuals' 'beliefs, feelings, and behavioural tendencies towards socially significant objects, groups, events or symbols' (Hogg, & Vaughan 2005, p. 150). Traditionally, researchers have stated that attitudes have three components: *affect* or positive and negative feelings toward an object, c*ognition*, the beliefs and knowledge about an object, and *behaviour*, the actions and responses to the object (e.g. Katz & Stotland, 1959; Rosenberg & Hovland, 1960; Smith, 1947 cited in Albarrcin et al., 2005, p. 82) (Figure 10.3). A more contemporary view defines 'attitude' as a unique entity, the general evaluative summary of information derived from the three elements of affect, cognition and

[54] It is also indicated that knowledge of a place is generally spatial but it may be non-spatial and culturally coded by symbolism, values, beliefs and so on (Appleyard, 1979a; Stokols and Shumaker, 1981 cited in Golledge, 1987)

behaviour (Zanna& Rempel, 1988; Cacioppo et al., 1989; Crites et al.,1994 cited in Albarracin et al., 2005, p.82).

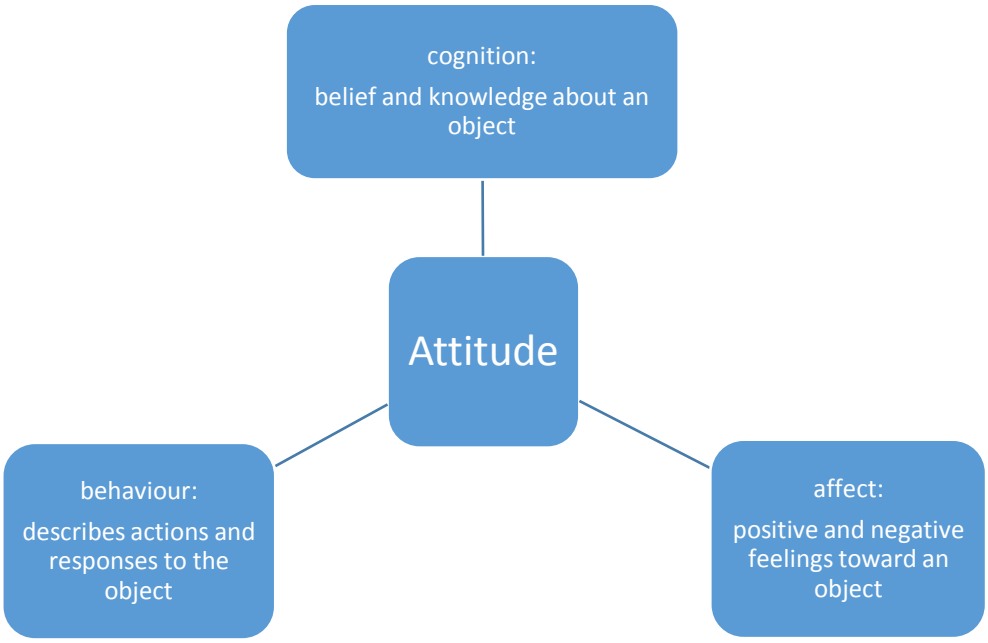


Figure10.3: Attitude formation factors (prepared by the author)

Therefore, interviewees' attitude towards their immediate neighbours is a general evaluation based on their *feelings* towards their neighbours, the extent of knowledge that they have about them, and the type of *behavioural* contact (social contact) that they share.

In order to analyse the responses, *attitudes* were divided into two sections of positive and negative. In each category, the type of 'behavioural' contact and 'cognition' level were also discussed. For instance, person 1 has lived in a grouped dwelling complex for 5 years and has a positive attitude towards his neighbours:

> *People who live in the front, they're* ***retired couple*** *and I'll* ***go and talk to them once a month*** *and* ***have a coffee with them****. The students who live in the second one, they generally keep to themselves. This South American couple and their daughter, who live in this one, are lovely people from South America, I think they are from Brazil and then there is an* ***Australian couple*** *that live in this one and* ***we have***

***drinks**. They [my neighbours] are not noisy at all. We see each other, we stop and talk. I get on well with them*.

This person has a positive attitude towards his neighbours, as they are 'not noisy'. He has close social contacts with 2 of the neighbours. One lives next door to him, the Australian couple with whom he has drinks occasionally, and also the retired couple, they talk and have coffee together. He exchanges occasional greetings with the other neighbours.

There are different theories explaining the relationship between 'attitudes' and 'behaviours' though it is out of the scope of this study to discuss all of them. However, some theories refer to 'bidirectional relations' between behaviour and attitudes (Olson and Stone, 2005). It is clear that *behaviour* affects attitudes and *attitudes* affect behaviour (Olson and Stone, 2005). When Person 1 has positive attitudes towards his neighbours, it creates positive *feelings* which influences his behaviours towards his neighbours. When he has a drink with a neighbour it means he has a positive attitude towards socializing with the neighbour. The extent of socialising also affects the cognition or perception of the neighbour and also the acquisition and level of knowledge about them. As Wyer and Albarracin (2005, p.275) state, 'knowledge is often acquired through direct experience of its referents'. Although Wyer and Albarracin (2005) indicate that knowledge can also be internally generated, whereas any cognition in regard to referents could be stored as knowledge and later be retrieved in *making judgement* or decisions.

Therefore, the cognition level of Person 1 towards his neighbours is related to the extent of his social experiences with them and his previous knowledge about them. The more social experience, the more knowledge is stored for future. Person 1 mentioned that he has limited social contacts with the other two neighbours, therefore he has limited knowledge about them. If those neighbours happen to be of different cultural backgrounds, then he would not be able to acquire knowledge and would just rely on stored personal knowledge, or some other sources like the media which can be biased.

Allport's (1954) *Contact Theory* suggests cross-cultural contact, such as Person 1 has with the Brazilian couple, can inspire positive attitudes and perceptions if the groups have equal status, common goals, intergroup cooperation, a balanced ratio of in-group to out-group numbers, an expanding economy and low levels of anxiety (Pedersen et al., 2005; Dixon et al., 2005 cited in Forrest & Dunn, 2011, p. 438). In his interview, Person 1 mentions that except for him and the students, all the other neighbours are owners and therefore of such equal status. The complex has intergroup cooperation in the form of an annual meeting, and it seems that only the Brazilian couple is from a different cultural background maintaining the one in five, ratio of out-group to in-group. Therefore, these conditions seem appropriate and amenable to expanding the social contact amongst the neighbours, and to increasing positive attitudes and reducing any future prejudice. In contrast, Person 7 has strong opposite views in regard to one or two of her neighbours.

Person 7 lives in a unit in a grouped dwelling complex, there are 8 units in a strata block with a shared drive way in the middle. She does not get on well with two of her neighbours:

> *This one was just sold, they moved in and they are owners but they **expect us to comply with them**. They are from **Bangladesh**. It is a family; they have a newborn and a 3 year-old.*
>
> *… because it is strata, there are rules, there are not many rules but there is couple of rules to live in harmony. That's a shared driveway and we've got all double garages, there is no room to park on the driveway, if you park on the driveway you lock everybody else out. So they park on the driveway and **get nasty**. They have one car, but they have constant friends, park on the driveway. They abuse verbally if you ask them to move the car. And this is a sort of thing that we have all the time.*

It is clear that using a shared driveway is a problem in the complex and the rules are not respected, resulting in negative contact, negative behaviour and as a result negative attitudes. Person 7 continues:

> *… we've been there the longest, we have been here 10 and half years, this one is a tenant, he's been there the whole time, that's owned and he lives there and he is very close to us. There is a retired couple in this one, they own it. ..this one is an investment property, has a renter. This one is a rental and has constant stream of people through it…*
>
> *The interviewer asks about their cultural back ground: Right across of* ***Asia and Middle East****. They are all* ***taxi drivers****.'*
>
> *The interviewer asks: This strata block that you are living in is occupied dominantly by Anglo or non-Anglo people?* **Probably 50 -50**, it is **high rental area**. All the units 3x2. .. it is always **tenants** not the owners because **they don't care**.
>
> *Interviewer: So do you get on well with your next-door neighbours? Yes.*
>
> *Interviewer: But you don't get on well with the others you mentioned?* ***I don't tend to****.* Language is a big problem, because most of them speak English but the new owners barely speaks English. I do wonder how much… you know if they've gone through buy a house they must have quite good understanding of the language…**They don't want to understand** what you are saying. I've got to a stage where I to keep myself to myself.

Although 5 out of 8 residents in the grouped dwelling complex, were owners and therefore of equal status and the in-group to out- group ratio is 1 (Anglo- to non-Anglo ratio), it seems that the parking issue leads to negative contact and behaviour which affects Person 7's attitude. The negative attitude seems to turn to judgments when she is referring to *tenants* as people who 'don't care' about the strata rules. The negative attitude goes further when she mentions that she 'doesn't tend' to get on well with one owner and the other

tenant neighbours. It is evident, that if this woman has limited background 'knowledge' about her two neighbours' cultural (ethnicity) backgrounds, that she may only have acquired from negative 'contacts' with them. Even though she has experience of dealing with international students, she has strong views towards **Arabs and Muslim** (as per the below excerpt from her interview). This shows a low level of knowledge or cognition about specific ethnicity and her experiencing negative contact and behaviour may have contributed to her prejudice and judgements in regard to other people from the same ethnicity. The interview with Person 7 continues:

> *Interviewer: Do you live alone? No,* ***I take international students***
> *Interviewer: So does taking international students as renters have positive or negative effects on your view towards different cultures? It's been a* ***big learning of****… I've taken from Brazil, Colombia and a lot from China and there are lots of differences* ***with Chinese****, huge differences.*
> *Interviewer: Was it positive or negative? Most of it was positive, just only one negative with students.* Even just using Carousel Shopping Centre, my nearest corner shop is Carousel … there are **mainly Arabs and Muslims** the ones with **full head dress and I have very strong views about them**.

Person 12 has another negative experience and contact with his neighbours. He says that although the young family is Australian his household does not get on well with them:

> *'Do you get on well with all of them? Don't get on with these people at all [next door young family]*
> *Why?Because we had two dogs and they don't like dogs.*
> *Are they Australian? Yes, but they don't like dogs.* ***We had an argument****. We are not doing anything wrong, we are allowed having two dogs, one of the dogs is my daughter's dog which has gone with her which is here [the 3rd lot on the right] and our dog passed away. So now we have no dogs but they don't talk to us.*

How did the argument start? They were saying dogs are barking a lot and ***they put in complaint to the council****. They came across quite aggressively about it. They didn't talk to us they just put the complaint to the council. ….they later denied that they have complained.*

So you don't say hello or wave to one another? No, I think she might be a little bit ***agoraphobic****, doesn't like people. She is a young mother. All places have garages at the back lane, one of my problems* ***with infill is that you don't interact with your neighbours*** *because they drive in and door shuts. We share here mail boxes and steps [front of the house], she never comes out, we don't meet her at letter box. She stays inside and if she comes out in the car and goes. We have teased her a little bit. We've sort of gone on her way and said hello, how are you and forced her to interact.*

How did she respond? She said hello and then got in the car and went. She goes out of the way not to interact. She is different.'

It is again evident that a simple negative contact has influenced the neighbour's perceptions and attitudes, a situation which may be hard to change later on. This negative attitude has resulted in unrealistic judgments about a person's personality, calling them 'agoraphobic'. As Person 12 does not have any previous knowledge about his neighbour, his only acquired knowledge is from the negative experience of a dog noise complaint. The neighbour in question has a similar cultural background to Person 12, therefore there has not been any judgment regarding ethnicity, but rather a judgment of her behaviour by saying she is ***agoraphobic***. In this case, a low level of cognition, negative behaviour, contact and experience has resulted in a negative feeling and attitude. When reviewing negative attitudes towards some neighbours, it is clear that *negative experiences, contacts and behaviours* affected the attitudes, resulting in unrealistic judgments and the avoidance of any future friendly and neighbourly contacts. Negative contacts may result in negative perception, and in a dense area one may encounter such people more likely than less dense environments, therefore it results in undesired density.

The following interviewee, *Person11,* is a migrant who has lived in Perth for more than 20 years:

> ***Person 11****: I know this person as a "hello'' "good bye", **just greeting, they are Australians**, I know just their first names. They wanted to **keep the distance**. This one I know very intimately; we go to each other's house.*
>
> *Why? Because they come from the same country as me so, they are Indian and I'm Indian. Then there is a person here, Australian, we don't see her and we don't talk to her. She is living with her daughter. This is a couple, Australian, the same age as me, I **invited them for dinner but they never returned**.*

While Person 11 attempted to have diversity in her socialising but was not as successful as she expected to be, she did not have any negative contact; therefore, she has no issue with any of her neighbours at the time of the interview. The next person is Australian, however he thinks that it is part of some people's **personality to keep themselves to themselves**.

> ***Person 9*** *[Australian]: …these neighbours here, they pretty much want to **keep to themselves** but I have introduced myself and one of the ways I did it actually; … just recently early in the morning he missed putting his bin out and the truck passed and he missed having his bins been emptied, and I said look this side hasn't been done, just wheel it over to this side of the road… that was a way to say hello and introduce myself and that **was a positive thing**. I **get the feeling** that they basically want to **keep to themselves**…*

A person's attitude towards neighbours represents a general evaluation, stemming from their previous social 'contacts and experiences', their personal 'knowledge' and their 'feeling' towards other people. Apparently, *positive* feelings, positive social contacts and *high level* of cognition or knowledge result in positive attitudes and less unrealistic judgements in regard to personalities or cultural backgrounds. Positive attitudes towards neighbours contribute to local community cohesion, and residents'

willingness to participate in local affairs (Putnam, 2000 cited in Letki 2008). Dense environment provides more spontaneous interactions as many people use more common areas and services. People who do not want interaction for any reason, do not perceive a dense environment positively. It is unlike the people who are sociable and may have had positive social interactions.

Theme 3: Current level of social ties (informal and formal socialising)

This theme investigates the current level of social ties between individuals in their neighbourhood. Questions six to nine [55] were asked in order to explore interviewees' social ties with his or her neighbours, and to ascertain whether they are inclined to develop informal socialising with their neighbours. Social ties include informal and formal socialising; the literature about this is discussed before the analysis.

Ross and Jang (2000), tell us that social ties reflect the degree of an individual's embeddedness in his or her neighbourhood. Social ties with neighbours consist of formal interactions which involve participation in neighbourhood organizations, and informal interactions which promote a sense of community and trust (Ross and Jang, 2000; Letki, 2008).

Social ties give:

> …the sense that one [is]…a part of a readily available, mutually supportive network of relationships upon which one [can] depend and as a result of which one [does] not experience sustained feelings of loneliness.' (Sarason, 1974cited in Doolittle and MacDonald, 1978, p.2)

It is also noted that 'the extent and quality of communicative interactions among residents within neighbourhoods is critical to engendering and sustaining a sense of community' (Doolittle and MacDonald, 1978, p.2). While formal socialising and interaction such as through organisational membership, are highly selective in terms of membership, informal types of

[55] Question 8 answers were similar to question 11, therefore they will be analysed further in the next section in this chapter (theme 4).
Q8: What do you think prevents you from getting to know your neighbours? (e.g. family income, cultural background, tenants/owner, their kids.)
Q11: If a new neighbour comes, what things might discourage you get to know them? (age, income, having kids or teenagers, working, tenants?)

interactions stimulate mutual care, trust and understanding (Letki, 2008; Ross and Jang, 2000). According to Ross and Jang (2000), neighbours with a higher level of informal integration and interactions have lower levels of *fear* and mistrust than those who are socially isolated. Formal participation in neighbourhood organizations does not reduce perceived fear or mistrust as informal social ties do (Ross and Jang, 2000). Informal ties or interactions occur when a person sometimes visits his or her neighbour/s informally, when they chat with them, and help each other by perhaps lending tools, or giving someone a ride or watching each other's houses (Ross and Jang, 2000).

The style or level of interaction that an individual adopts benefits his or her quality of social life (Mistzal, 2000). There are three levels or 'realms' of interactions: *encounters*, *exchange* and *pure relationships* which can be described as civility, sociability and intimacy shown in Figure, 10.4, (Misztal, 2000).

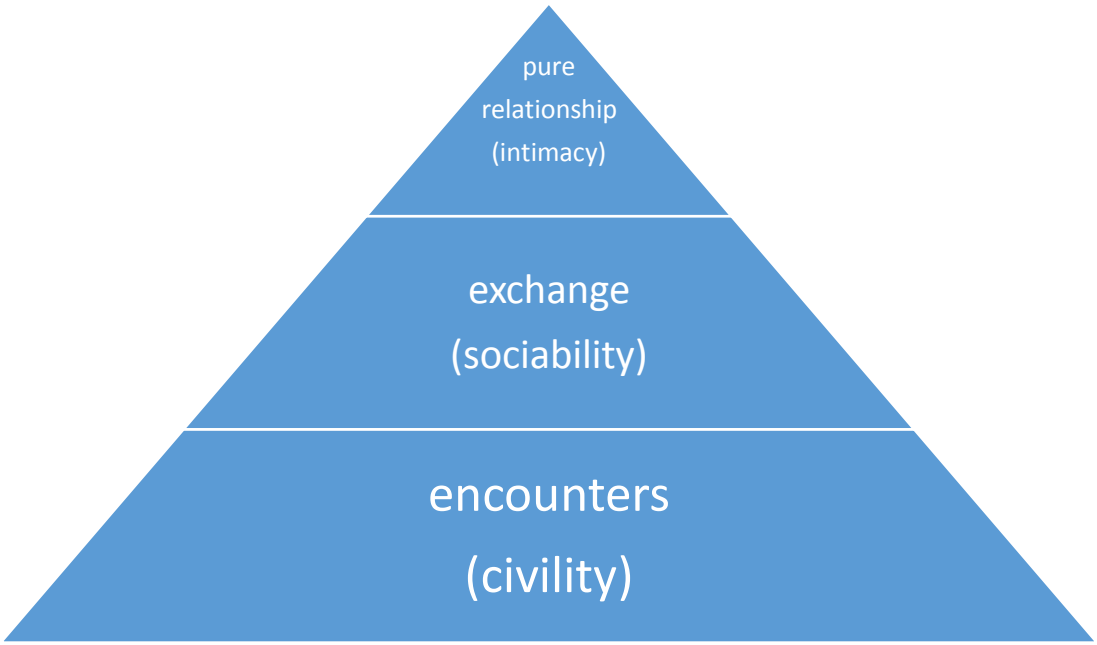


Figure 10.4: three levels of interactions (prepared by the author)

'Encounters' are the most general and most elementary interaction, at the lowest level, while 'Pure Relationships' represent a more inclusive domain at the highest level (Misztal, 2000). An 'encounter' has the lowest level of close

association and voluntary sharing of personal information and private emotions. It mainly occurs in non-institutional settings, where people do not exhibit their identities, roles, expectations or interests. In this type of interaction, 'persons' are bound by general social norms (Misztal, 2000). 'Encounters' are accidental and momentary, and are based on some kind of mutual awareness and rules of politeness (Misztal, 2000). Therefore, when an interviewee's informal interaction is limited to waving or otherwise greeting his or her neighbour, the social ties stand at 'encounter' level, as there is no sharing of expectations, or identities etc.

The second level of interaction is 'exchange' or 'sacrifice in return for gain' (Simmel, 1978, p.175), a dominant social relation between people who occupy certain social positions (Misztal, 2000). Their behaviour is not only a function of their individual character and personality; but also reflects the social roles they are enacting such as 'neighbours' and 'co-workers' (Misztal, 2000). When an interviewee's informal interaction is more than a formal greeting, such as having drinks at the front of the house, chatting with neighbours, looking out for each other's home, and picking up mail, the social ties are considered to be at 'exchange' level, as it reflects their social roles as neighbours.

The third level of interaction is 'pure relationship', in which people share emotions and personal information and have voluntary engagement in dealing with others who are close and familiar individuals such as friends and partners (Misztal, 2000). The voluntary and spontaneous sharing of personal information between parties in this interaction is an essential element (Misztal, 2000). When an interviewee's informal interactions with his or her neighbours is deeper, extending to such behaviour as visiting their home, having dinner with them and gaining more personal information, his or her social ties stand at 'pure relationship' level, the highest level.

Interviewees' responses were divided into two sections, on formal and informal interaction. The results show that only 5 out of 17 interviewees (29 percent), were involved in some kind of formal institutions such as sport clubs

(including local and none local ones). The rest did not have any formal association to any local institution.

According to the informal interaction categorization outlined above, all of the interviewees' informal interactions with their immediate neighbours are at 'encounter' level as they have usually lived long enough at their address to be familiar with their neighbours but do not necessarily exchange greetings with them. Eight interviewees have informal interactions with just one or two of their neighbours at exchange level and only two interviewees have informal interactions with a few neighbours (more than two) at this level. Only three interviewees have informal interaction with just one neighbour at pure relationship level (Figure 10.5).

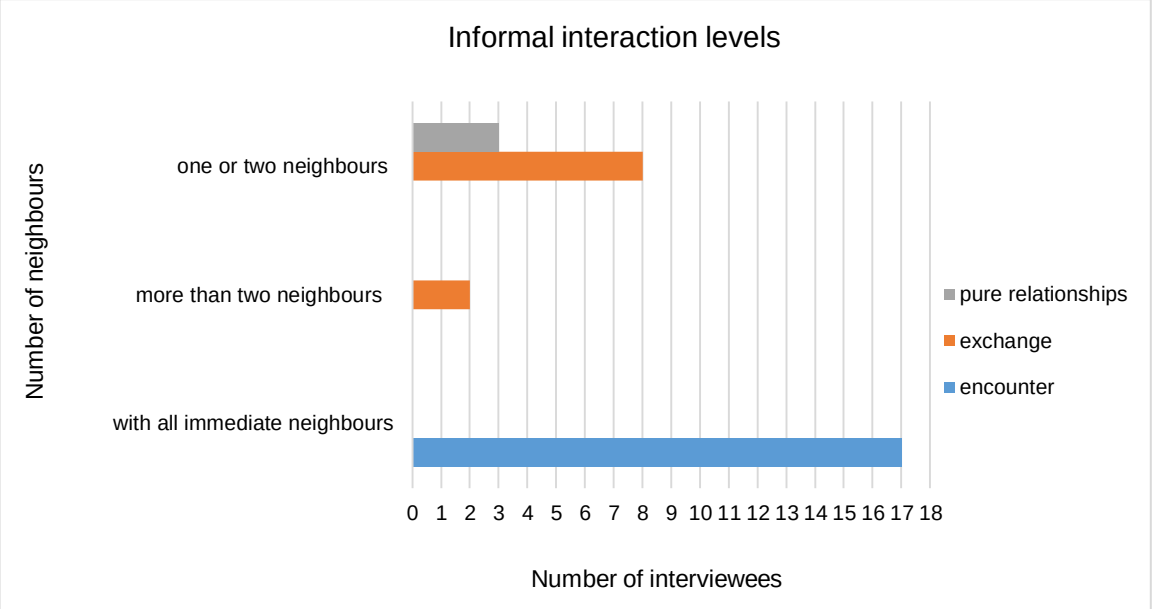


Figure 10.5: Informal interaction levels of interviewees

While the interview analysis was done qualitatively, numbers may reflect some issues that are worth exploring further in future research. The following tables demonstrate each person's social interaction analysis, both formal and informal, along with each one's self-drawn cognitive map[56]. Each

[56] Maps were scanned and reproduced in Photoshop by the author to show the interviewee's home location. The names of some places were deleted to keep the interviewee's home location confidential.

interviewee's comments were analysed according to the literature discussed above.

Person 1 (Figure 10.6): It is of no concern to this interviewee, in order to socialise with his neighbours, whether they have the same level of income, are in the same age bracket, whether they are a family or a couple, neither is the interviewee concerned about nature of their cultural background. He lives in a suburb with a high socio-economic demographic. He mentions that ***security threat*** prevents him from socialising, and he is not involved in any sort of formal interaction within a local organization due to work commitments. However, his informal interactions with his neighbours span all three types.

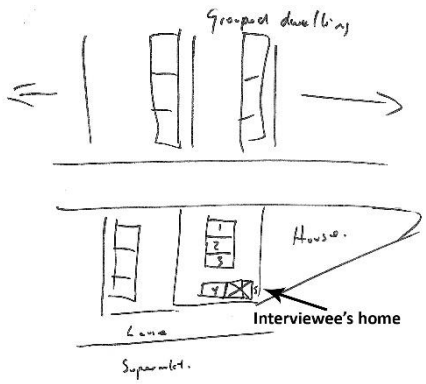
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 1		No, he is not involved in any formal local groups. Once a year meeting for properties issues.	Stop and talk with neighbours 2 and 3.	I have drinks with Australian couple (neighbour number 4). Picking up the mail and checking out the house for each other.	Coffee once a month with retired couple at front (neighbour number 1)

Figure 10.6: Schematic map drawn by Person One and interviewee's level of interaction analysis

Person 1 says: *…because I moved a lot … so when you move to a new neighbourhood you are out of your comfort zone and you wanna feel relaxed and if your neighbour comes to you and says hi and how are you then I think you feel better.*

His character and past life experiences, which he mentions in his interview, have helped him to develop different levels of informal socialising with his neighbours.

Person 2 (Figure 10.7): A neighbours' cultural background, their age, whether they are a family or a couple, whether they are a tenant or an owner, and the nature of their and cultural background is of no concern to this interviewee when it comes to socialising with her neighbours. She says: *I'm one of those people if I pass someone, I'll say hello, and you just then take the cue from what happens then. I don't like to go to a neighbour unless there is something to say*

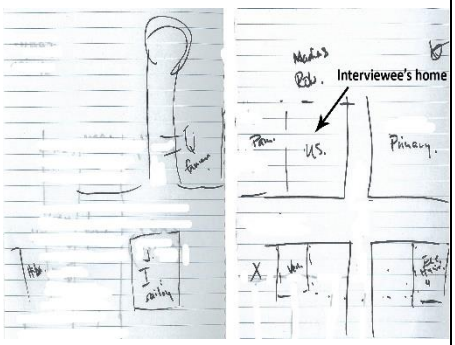
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 2		Yes, she is a member of South Perth Yacht club and Fremantle Symphony Orchestra. The second group helped her to connect to diverse people with different age, job and cultural background.	She knows 7 of her neighbours. She has frequent encounters if she walks the dog and sees them, says hello and has a chat.	One of her next-door neighbours looks out for her home and picks up mail when she is away.	She shares meals and goes to one neighbour's home more frequently.

Figure 10.7: Schematic map drawn by Person Two and interviewee's level of interaction analysis

Person 2 has formal interactions through two organizations, which are not local. The second one, which is a Symphony Orchestra, helped her to connect to diverse kinds of people. Her informal interactions include all the three levels.

*Does the involvement in such organizations help you to meet diverse people? Yacht club not, orchestra, yes. In the orchestra, we do have quite a range of people with different ages, different jobs, and different cultural backgrounds… **basis of many of my friendships** today*

Person 3 (Figure 10.8): This interviewee knows her neighbours' first names, and even their jobs, she even knows that one neighbour has a disabled daughter. She knows many of her neighbours, including those a couple of streets further away from her street.

Person 3 says:

*I get to know them by saying hello, and generally, **I'm the first person start talking**.*

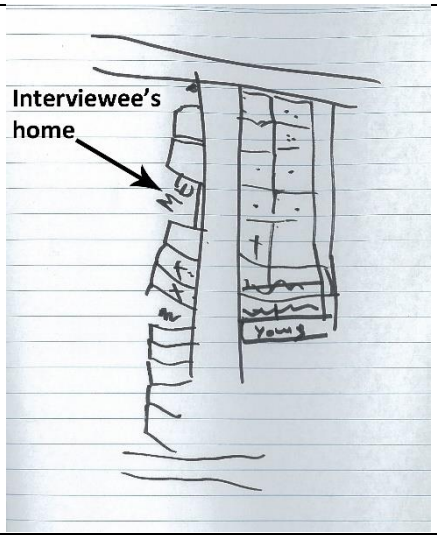
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 3		Yes, she is involved and guided a group to oppose high density development in her suburb.	She knows more than 10 neighbours. Usually greets them if she sees them.	She mentions that she looks after some neighbours' homes and picks up their mail.	She didn't mention whether she shares meals or has dinner with any of her neighbours. However she helps a few neighbours.

Figure 10.8: Schematic map drawn by Person Three and interviewee's level of interaction analysis

Her only formal interaction or local group involvement is with a group *opposing high-rise development*. Although she did not mention whether she

shares meals or drinks with any of the neighbours, she has close relationships with some neighbours and sometimes helps them out. Her informal interactions include all three levels

Person 4 (Figure 10.9):

> *Do you like to know other neighbours better?* *Not so much.* *Why?* *Because we're just so busy, my husband is busy with his fulltime work, busy with teenage daughter, honestly, I'm crazy busy,* ***I'm happy to say hi and sometimes I walk over and say hi and how are you doing? But that's enough I don't have time for socialising.***

It seems that Person 4's busy life limits her style of informal interactions with most neighbours to 'encounter' level, and with one neighbour to 'exchange' level. She is involved in her daughter's school but not in any other local organizations.

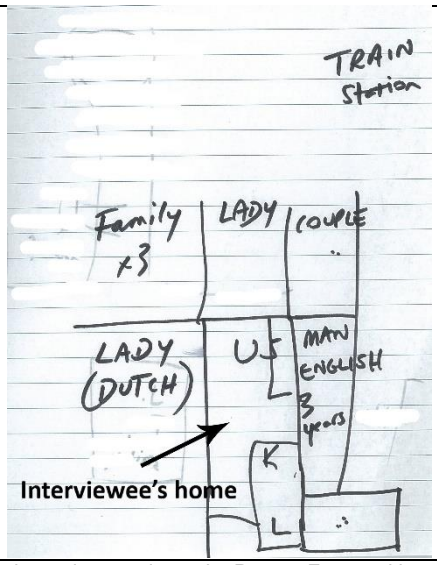
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 4		No, she works full time, doesn't have time for other engagements.	She knows 5 neighbours.	She looks after a neighbour's house and picks up their mail when they are away.	She once had dinner with a neighbour which didn't happen again.

Figure 10.9: Schematic map drawn by Person Four and interviewee's level of interaction analysis

Person 5 (Figure 10.10):

What do you think helps you to get to know you your neighbours better?

To develop the relationship? Yes, ***similar age, similar level of education, or work*** *… I suppose if you got a plumber and electrician next to each other they may get along well, or a lawyer or o banker there have more of similar job and similar educational root…*

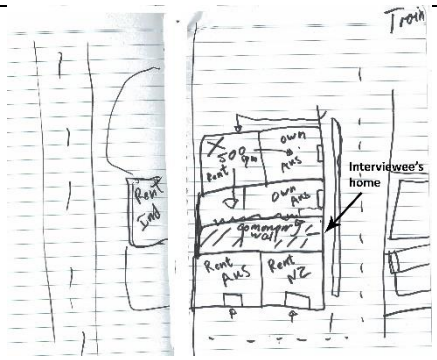
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 5		Just through his kid's school.	He knows almost 6 neighbours.	With one neighbour (next-door), he picks up mail or has drinks at the front of the house.	No one. No home visits or shared meals.

Figure 10.10: Schematic map drawn by Person Five and interviewee's level of interaction analysis

Person 5 believes he has a neighbourly feeling with his next-door neighbour as he has *things in common* with him and they *cross paths a lot* because they have a common wall and fence. It seems the school is the only formal organization that he and his family are involved in. His informal interactions are at encounter and exchange levels. He believes that being friendly and having things in common create neighbourly feelings among neighbours.

Person 5 says:

…the reason we know about these guys and we've got a sort of friendship, neighbourly thing is because ***we share this entrance*** *so when they put their bins out we put our bins out, talk to them, I'm doing something and then he drives in and starts talking,* ***we cross***

***paths a lot**. It creates a neighbourly feeling. I don't have a neighbourly feeling with these guys because they are always coming and going here I never get an opportunity to develop any relationship with them.*

Person 6 (Figure10.11): Although Person 6 knows her neighbours' names and their cultural background, her personal informal interactions with most of them remain at encounter level. She is keen to develop relationships but for example the family in front are different and they don't cross paths very often.

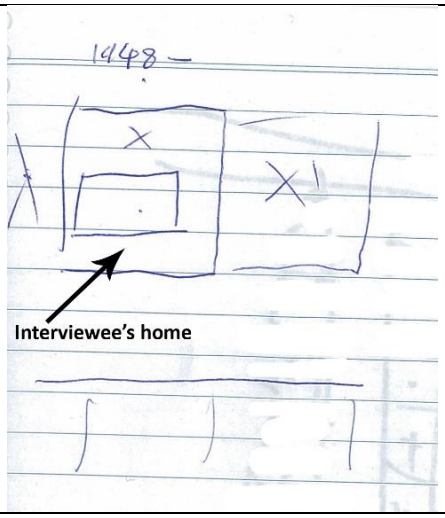
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 6		No, she doesn't seem keen either even though she is alone and retired.	Only familiar with 3 neighbours. Just chat.	With neighbours who live at front. She lives in a duplex block.	Just has a neighbour across the street with whom she travels and they have been been friends for many years.

Figure 10.11: Schematic map drawn by Person Six and interviewee's level of interaction analysis

*Do you want to have a short chat or having a meal together? I always have a short chat if I go out to the post box and the neighbours out there then we always talk across the fence, we don't share meals or thing like that. But **you feel they're there**, you know who they are and if you are in trouble or need help, I'll call out to them.*

Person 7 (Figure 10.12): This person was not inclined to know her neighbours better.

Do you like to know your neighbours better? In some ways but I don't ***want to be live in my neighbours' pocket****. I had* ***bad experiences*** *over the years with my neighbours…even I was living with kids back in to UK, I don't want neighbours constantly on my door to borrow things, coming around for a cup of coffee all the time, I like to keep myself to myself.*

It is clear that this person's past experiences affect her perceptions and attitudes and she prefers not to socialise even though she is old and alone. She continues:

*It is nice to speak to your neighbours; it is nice to know if they help you when you need especially when you get older. I****t is nice that somebody cares if they don't see you for few days****.*

What do you think prevents you from getting to know your neighbours?

For example, when this new neighbour came how did you perceive them?

The first time I saw them out there I welcomed them and said Hi.

Did they respond back? He did. She didn't, but then during first week or two every time you opened the garage door or where I spend most of my time in my office (is at the front of the house), I cannot open my blinds any more as they all standing there and staring in, and their garage door is permanently open and the older couple, the man spending all the day standing in the garage and staring, which make me very uncomfortable.

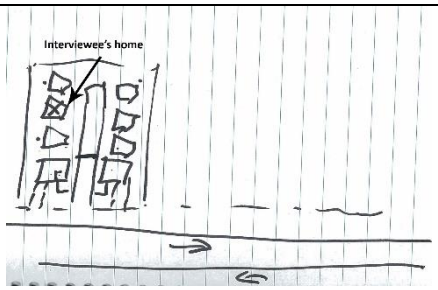
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 7		Not a local one just lung foundation Australia.	Familiar with all the neighbours in the grouped dwelling but know 3 better.	None	None

Figure 10.12: Schematic map drawn by person seven and interviewee's level of interaction analysis

The neighbour's behaviour didn't encourage this interviewee to socialise and get to know them better. She has limited her informal contacts with most of the neighbours (3 of them) to encounter level, and with the rest she has no contact at all.

Person 8 (Figure 10.13): This person works full-time and she is busy, so she thinks she doesn't have time to socialise. However, she also mentions that she is not a sociable kind of person.

> *Do you like to have chat or invite them over to have a meal? Ohh,*
>
> *Do you have kids? No, I have a shared house so it's me and currently two housemates. We have got our own house thing and we do eat together sometimes and hang out but I guess not.*
>
> *So it is not possible for you to invite them? I wouldn't have the space. I know they've got at least two kids and I literally don't have enough chairs in my house to do that sort of thing.*

It is clear this person is not *inclined* to know her neighbours better based on her personality, she has a busy life and does not have enough space to invite them (sharing her home with others). Her informal interaction is limited to encounter level with one or two neighbours and none with others.

> *So I guess you don't have time to be involved in any local organizations or activities? Well, I do a thing like Park Run which is*

just at Canning River, it has people from different suburbs but because it is so close there are definitely people from that local area who are coming along.

... How did you find out about it? I found about it from my friend from Church so I'm involved in a Church in … so again not directly neighbours but local people so I interact with people in Victoria Park and East Vic ….

Did this Park run help you to connect with diverse people, with different age groups or different cultural backgrounds? ***I hate to say it but it is mainly Anglo people****. There are few Asian people but it is mainly Anglo people. Age group you've got definitely a wide range, young children with parents up to a lady in her 80s. It is unfortunately* ***mono culture****, in my church there is more cultural diversity there, we've got mostly Anglo, but we have some Koreans, Indonesians.*

Although she is involved with two social groups, she has just contacts with different cultures through church.

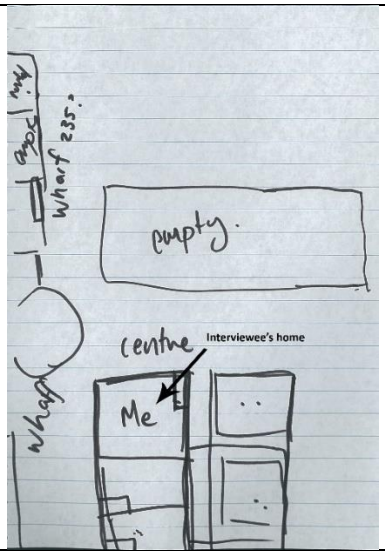
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 8		Park Run which is just at Canning River.	Just one or two neighbours, doesn't know any name at all.	None	None

Figure 10.13: Schematic map drawn by Person Eight and interviewee's level of interaction analysis

Person 9 (Figure 10.14):

> *Would you like to know your neighbours better?*
>
> *Yes, I'll try to. I think it is important. And other wonderful thing is that for the first time in my life* ***I've actually got a dog*** *but what's good about that is* ***I'm walking all the time and so people see this little doggie and can't help to say hello****… and so it means I actually get to know neighbours* ***on the next street not just next door and that's really a positive thing****.*

Walking the dog helped Person 9 to get to know some neighbours at encounter level.

> *What do you think helped you in getting to know your neighbours much better? For example, their cultural background, having things in common, or kids in the same age as your granddaughter?*
>
> *My granddaughter is 14 now so we did have some contacts earlier with other neighbours who had younger kids, that is a good thing, they* ***need to be about the same age****, it doesn't quite work if they are not. I think* ***kids playing together****, is a very good thing, it helps* ***break down some of the barriers****, a lot of kids, unless they were told they wouldn't notice their difference, they just play and enjoy each other's company so I think that is a good thing…*

Person 9 refers to children as breakers of barriers between different cultures. It seems that families with kids have more chances of developing their informal social interactions if they wish (Rose et al., 1998).

> *You said your front neighbour is Filipino, have you guys ever had a meal at each other's home? Not so much having a meal but we exchanged gifts at Christmas*
>
> *Do they have kids? Yes, very little ones. ..on hot summer days you might walk the dog stand outside they sit on the grass, the neighbour*

here, one from there, before ***we notice a nice small meeting is going on****.*

What do you think prevents you from getting to know a new neighbour? I think one of the things is people sometimes **feel hesitant about making the first move**. Am I going to be **invading their privacy**? Just that little hesitation.

This person thinks that the first move is very important to get to know anybody. Many people may hesitate as they may not know if they are invading someone's privacy or not.

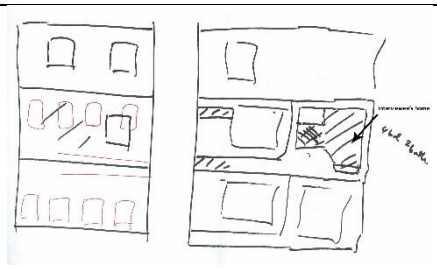
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 9		Not a local one.	With a few neighbours.	With front neighbour.	No.

Figure 10.14: Schematic map drawn by Person Nine and interviewee's level of interaction analysis

I suppose you may first say hello and wait to see, if they don't respond you may say okay, they want to keep to themselves? Yes, these neighbours here they pretty much want to keep to themselves but I have introduced myself and one of the ways I did it actually, they have been here every long, just recently early in the morning he missed putting his bin out and the truck passed and he missed having his bins emptied, and I said look this side hasn't been done, just wheel over this side of the road… ***that was a way to say hello and introducing myself and that was a positive thing. I get the feeling that they basically want to keep to themselves****.*

Are they young? No, 50s.

Person 9's informal interaction is at encounter level with a few neighbours, and at exchange level with the front neighbour. His formal involvement in a charity community helped him to know people from different income groups, and cultures, but it is not a local group and does not help him to get to know local people.

Person 10 (Figure 10.15):

> *I work full time and long hours but my husband does know the neighbour. Yes, they are family, Australian family, my husband plays a guitar and his son* ***plays the guitar****….* This **neighbour has many people in it obviously rental**. I think it is a house that state owns it.
>
> Are they noisy? They got children but they are fine. I think they **might be Muslim**.
>
> Do they wear a hijab? Well I think they are probably Australian/Muslims, I don't really know them.
>
> *You don't say hi if you see each other outside? No, we don't,* ***we have these high fences*** *and you don't really see neighbours.* My husband is usually in garden and sees people and has lots of conversations. Their unit's back there (my house). I don't know them at all.

It is clear that the interviewee herself does not have any informal interaction with neighbours, only her husband has such connection mostly at encounter level with a few neighbours, and at exchange level with one neighbour.

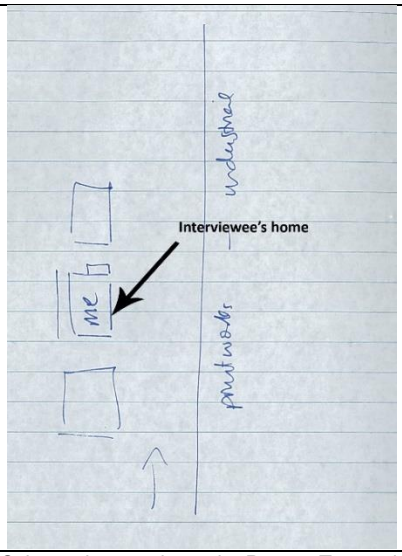
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 10		None.	Her husband knows the next-door neighbour.	None.	None.

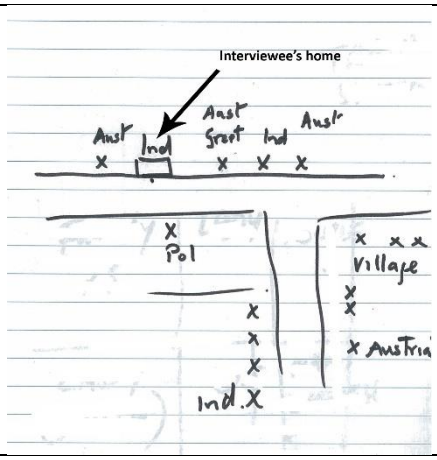
Figure 10.15: Schematic map drawn by Person Ten and interviewee's level of interaction analysis

> *What do you think prevents you getting to know your neighbours? I certainly watch the people and I like to be friendly, but **I don't want to get very very involved**, it would be very it would be very hard to juggle more in my life.*

Although Person 10's work connects her to people of different cultural backgrounds and she has had positive experiences, she prefers to keep her social relations at the encounter level of waving and normal greetings.

Person 11 (Figure 10.16): This person is from a different cultural background from the host society. In her interview she explained her informal interactions with her immediate neighbours well. She has lived in her current address for more than 10 years, and during this period of time she has managed to develop informal interaction at pure relationship level with one of her neighbours, who is from a similar cultural background, With the rest of the neighbours, her interaction is at encounter level or none. Although she runs her charity work along with her full time job, she could only develop deeper neighbourly friendship with one neighbour. Immediate neighbours, who are

mainly Australians, keep their distance from her and limit the informal

	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 11		None, just runs her charity work.	Just a few at encounter level.	One neighbour at encounter level as they are from the same cultural background.	One through her charity work.

interaction at encounter level.

Figure 10.16: Schematic map drawn by Person Eleven and interviewee's level of interaction analysis

*I know this person as a "**hello" "good bye", just greeting** (they are Australians, I know just their first names)…*

Do you want to have a chat and have a meal with them, if they invite you? Only if they invite, I haven't invited them because they just wanted to be ...**they wanted to keep the distance**. Then there is a person here, Australian, we don't see her and we don't talk to her.

Have you tried to approach her? No, I haven't. She is living with her daughter.

This is a couple, Australian. I have invited them for dinner and all that but they never returned the invitation.

*Why did you invite them not these ones? Because these are younger and those ones are more mature. **Age is important to me**. I can discuss matters with them but not with younger ones.*

If they invite you for kids birthday or Christmas party, are you willing to go? Yes

What do think helps you to get to know your neighbour better? ***Cultural background really helps*** *…so sometimes when I know they want to keep their distance, then I don't break that barrier…like this couple here, I don't break the barrier* ***they want to keep the distance****. They work full time, they are in 30s.*

So what do you think prevents you getting to know your neighbour? It is ***their manner and how hospitable they are****, whether* ***they smile when you greet them and they want to know about you****. They* ***come and talk to you not just waving hands from their car or from their home****. Have a chat and ask how are you doing? How was your day? They want to* ***make conversation****. Some don't want to make conversation. I don't blame them because they're up* ***bringing is not to talk to strangers****….*

Person 12 (Figure 10.17): The interviewee stated that he had disputes with one of his immediate neighbours. Disputes and arguments with the next-door neighbour definitely decreased the level of informal interaction and lower the inclination for socialising. This person tries to interact with his neighbours, however his next-door neighbour, who had an argument with him, is not keen to amend the neighbourly relationship and interact and socialise.

So what do you think prevents you getting to know your neighbours? If they are not similar to us, I mean ***age****. This sort of housing, which are close together, is best suited to aged-couples, downsizing. All the neighbours are* ***owners****.*

Are you involved in any local organizations…? No

Are you interested in doing that? No.

Why? I used to do that sort of thing when I was younger I guess my work doesn't let me

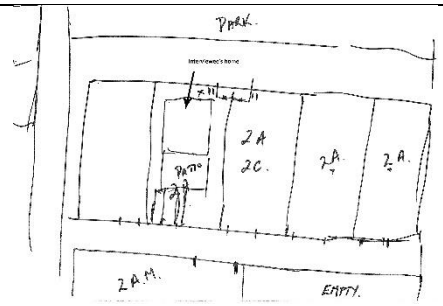
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 12		None.	With a few.	None.	None.

Figure 10.17: Schematic map drawn by Person Twelve and interviewee's level of interaction analysis

The interviewee's informal interaction with his immediate neighbours is limited to encounter level. Except one neighbour who is his daughter, he does not have informal interaction at exchange or pure relationship level with the other neighbours.

Person 13 (Figure 10.18): This person has been living in the area for 4 years and knows her immediate neighbours. Her informal interaction with them is mostly at encounter level.

> *…I know the neighbours on the either side there, I know the neighbours there, I know the neighbours here by sight, I don't know their actual name but I've spoken to them… train station is about 2 mins walk from where I live, I don't own a car so I'm constantly walking to and from train station when I want to go anywhere, so I'm always walking and pass the back lane here, so you see people and* ***you say hello to them****,*
>
> *Do they usually respond? Yes,*
>
> *What about longer chats? A little bit of chit chat.*

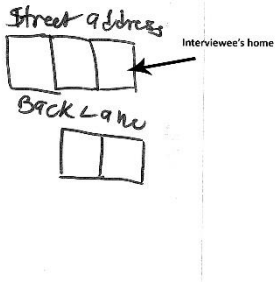
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 13		None.	With a few.	None.	None.

Figure 10.18: Schematic map drawn by Person Thirteen and interviewee's level of interaction analysis

Person 13 is keen to know her neighbours better. She is working full time and some available community events or classes do not match her time schedule.

> *Would you like to know your neighbours better? Like having a picnic together, or BBQ?* ***I think that would be nice and good idea****. I do find with my work hours though sometimes it is hard to meet and to get to know my neighbours so well.*
>
> *What do you think helps you getting to know your neighbours better, for example having things in common, what sort of activities …?* I think **street party** would be a kind of good idea.
>
> *Are you the kind of person to open up a conversation? It depends, sometimes I am and sometimes I'm not. Sometimes, I just like to sit there and be quiet. Depends on my mood and how I'm feeling at the time.*
>
> *Are you involved in any local organizations or activities?* I found a lot of organizations and activities that run, they've got a community centre nearby which is really great but the problem is that a **lot of the activities are during the day**... Because **I work full time**, I do a lot of things on Saturdays so doesn't leave a lot of time for me doing something, Sundays are usually good days but it's usually closed.

Person 14 (Figure10.19):

Do you want to get to know your neighbours better, the ones you get on well with? I have got a lady friend who lives up there somewhere here, I have a friend in Fremantle and a little group of friends in Rockingham so my social life tends to be outside of this neighbourhood.

Can I ask why? Because I moved from Rockingham to here so I still got friends that I had there …I had big house, I downsized and I need to live near the station so I can get to station in 4 minutes and going to the city…I just say hello to these ones.

So you don't want to extend your social life with neighbours more than that? No

Can I ask why? **I might be arrogant**. I have been fairly well-educated and I like robust discussion on intelligent subjects whereas I know for a fact if I want to engage in conversation with these people next door, they are pleasant but they wouldn't engage on intellectual level.

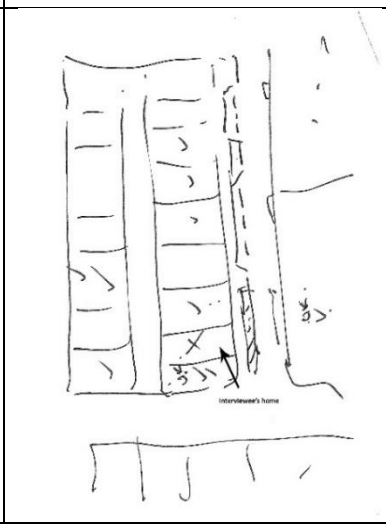
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 14		Yes.	With a few.	None.	None.

Figure 10.19: Schematic map drawn by Person Fourteen and interviewee's level of interaction analysis

Person 14 prefers his old friendships to making new friendships in his neighbourhood. A person's level of education is important to him which is why he prefers to socialise more with his old friends. He is involved in resident group associations and he enjoys it. He is a retiree and has more time for socialising. His informal interactions with his immediate neighbours are at encounter level.

Person 15 (Figure 10.20): This person has been living in the neighburhood for 3 years. She knows a few neighbours and her informal interaction with her immediate neighbours is at encounter level. She is not involved in any formal local groups.

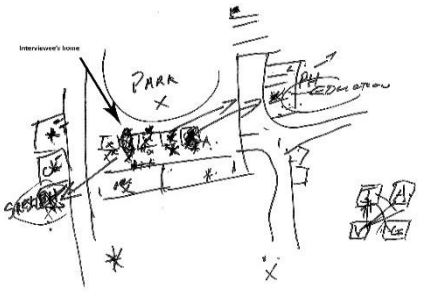
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 15		None.	With a few.	None.	None.

Figure 10.20: Schematic map drawn by Person Fifteen and interviewee's level of interaction analysis

Person 15 says: ...Next door is a Chinese lady, [she started drawing her local street and neighbours' houses] here is a single residential, state housing; one family with multiple young people that come and they had a drive-by shooting. ….. The other neighbours, here is a ***young Chinese couple*** *and this one, this one and this one are concerned about that one [referring to state housing dwelling], because of* ***their anti-social behaviours****…. This side also there are some* ***public housing****…they have been a couple on this one and one in this one [referring to two lots] who would yell abuse loudly. One family has moved out but still this one is remaining and has anti-social behaviour. Young mum and a child, yells at the child. She is young,*

*uneducated and struggling…. this person here [referring to next door neighbour] and her family, partly won't speak to us because we're renting… but the majority of people are nice caring people. ...**Mixture of working and retired people**…*

Person 16 (Figure10.21): This person was involved in some sport clubs when he was young. He has positive attitude towards his immediate neighbours.

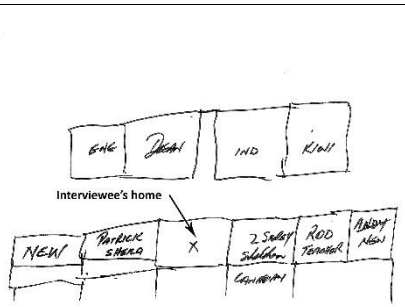
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			Encounter	Exchange	Pure relationship
Person 16		When he was young he was involved in some athletic clubs.	With 7 neighbours.	He didn't mention this. However he seems quite familiar with his next-door neighbours	He once went to a housewarming party of a neighbour 's home a few blocks further.

Figure 10.21: Schematic map drawn by Person Sixteen and interviewee's level of interaction analysis

*Person 16 continues:… Next door one is a builder, recently built a new house, the other one has a two storey house, and their kids are gone. I know my immediate neighbours [names were mentioned] … I usually see them outside and talk to them … across the road is this **Indian family**, don't remember their names but they are lovely people, our daughter **exchanges Christmas presents with their daughter**…. back door neighbours have teenagers and they are out of control, …the other house is **rental** and they are usually loud, we know the owner but obviously owner cannot control them either*

Person 17 (Figure10.22): This interviewee is an Australian man married to an Indonesian woman and he has worked a lot in the South-East Asia region. He was involved in his kids' school when they were younger but now he is very busy with work and does not have time to be a member of a formal

social group. He has positive attitudes towards, and experience with his neighbours. Person 17 says:

> *Yes, we know next door neighbour, the couple the opposite and most of the people on top of our street and probably two or three down the street.*
> *So do you know if they are family, or if they are working? Whether they own the house? Or their age or cultural background? Yes, if you are facing our house, on the right it is Jenny …, her de facto husband died last year, she is there by herself…. On other side the owners are in Broome, the husband is the head of a psychiatric hospital in Broome.,. they just let the house out, so new tenets there, met the wife, not husband yet, there is a rolling cycle thing to get to know them. Directly the opposite side of my home are Meg and Raj they have been here longer than us and they are in late 80s and getting quite ill now, next to them they are friends that just let the house out and we haven't met them yet. Next to them Demonic and his wife live, next to them* ***Chinese*** *fellow friend lives, and next to her is a friend of my daughter and generally we know our immediate neighbours well.*
> ***We usually say to new neighbours [close to us] welcome to neighbourhood, shake their hands and if you need any help, some people accept and some people don't****. Previous tenants here [indicating on the map] we had dinner with them and we looked after their house.*

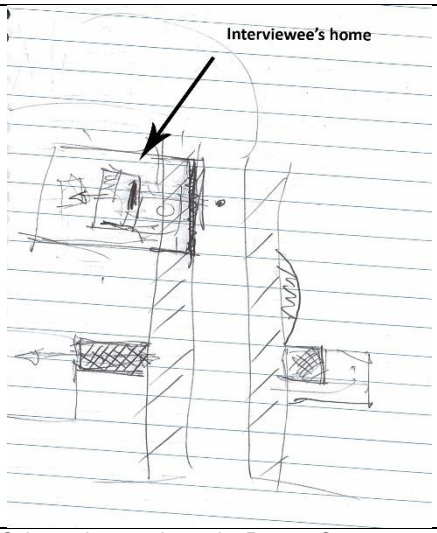
	Schematic map drawn by interviewees	Formal interaction	Informal interaction levels		
			encounter	exchange	Pure relationship
Person 17		Not now, when my kids were at school, I was involved with their schools.	With few neighbours.	With one or two.	Once invited one for a dinner but never happened again.

Figure 10.22: Schematic map drawn by Person Seventeen and interviewee's level of interaction analysis

The results of the interviews show that most of interviewees have no involvement in any kind of formal institutions either local or non-local. A sense of community has emerged as the result of various types of interaction, however formal interactions are not democratic and effective compared to informal modes of sociability and interactions (Letki, 2008). Usually, formal associations with institutions occur through membership, which is determined by socio-economic status (Letki, 2008), while informal associations are spontaneous.

As previously discussed, interactions of any kind stimulate perceptions and attitudes. For example, people who are socially active are more likely to offer help to others, and to know their neighbours, they are therefore more likely to socialise informally. Regarding informal interaction categorizations, most of the interviewees have interactions at 'encounter' level (the lowest level) with a few of their immediate neighbours, although this is sometimes limited to 'waving hands' and 'formal greetings' with one or two neighbours. This indicates informal neighbourly socializing and consequently a sense of community is not strong. Informal sociability is one of the important elements

of social capital and strongly stimulates positive attitudes and perceptions towards neighbours (Letki, 2008).

Most of the interviewees state that neighbours' behaviours are important to them and may discourage or prevent them from socialising. A few interviewees mentioned appearance and education level as important indicators for encouraging them to socialise with their neighbours, increasing their level of informal interactions. Furthermore, built form conditions have also had an impact on neighbours' interaction. One interviewee (Person 10) mentioned that high fences are an obstacle to seeing neighbours frequently (discourages). The other interviewee, Person 5, states that shares entrances (driveway), and this results in crossing the neighbour's path and having a chat. Therefore, being *friendly* and *showing neighbourly looks and manners* encourage people to socialise with each other. This aspect is discussed further in the next section.

Theme 4: Social perception towards new neighbours

In investigating the social perception towards new neighbours in questions 10 and 11 of the questionnaire, fourteen out of 17 interviewees, which is more than 80 percent and the majority, mention that behaviour and manners are more important factors in encouraging them to socialise with their neighbours than visible cognitive social stereotypes. However, one person indicates that appearance, another cultural background and yet another age, are most important indicators in encouraging them to socialise.

In a dense area, there is a high chance of neighbours' encountering each other, and this may result in social interaction, and have an impact on social perception. Social perception is the way in which people perceive, judge, evaluate, and understand other people (Jussim, 2012). In social psychology, social perception is classified as 'social cognition', and refers to the way in which people think or make sense of other people (Wegner and Vallacher 1977 cited in Carlston, 2013; Fiske and Taylor, 2016). Social cognition is part

of the processes of social interaction through which individuals gain knowledge about others' behaviours (Snyder et al., 1977), it is the means by which people understand each other in interactive situations (Jaegher et al., 2010). Individuals are "constructive thinkers" searching for the causes of behaviours, making interpretations about people and their circumstances, and acting upon this knowledge (Snyder et al., 1977). Individual's impressions of others are formed from descriptions that are received, for instance from the person's body language, facial expressions, and paralinguistic cues (Shaver, 2015).

Psychologist researchers agree that social perception can be inaccurate and biased (Allport, 1954; Snyder et al., 1977; Jussim, 2012). For example, someone may have a positive perception of another person because she or he is a member of a certain group, such as family, or they may be from a similar culture. They may have a negative perception or prejudice against someone who is not a member of that group (Stephan and Stephan, 1985 cited in Oskamp, 2000). Moreover, many psychologists believe that *social stereotypes* also affect interpersonal perception, as they are usually simple, over generalised and widely accepted (Allport, 1954; Karlins et al., 1969; Snyder et al., 1977; Jussim, 2012). Some of the social stereotypes such as race, social class and ethnicity are visible and distinctive, affecting information processing and social interaction between people (Allport, 1954; Snyder et al., 1977, Jussim, 2012).

Allport (1954) cites many studies, which show the biases and errors of social stereotyping, stating that social stereotyping, and prejudice undermine social perception (cited in Jussim, 2012). Visible stereotypes are entirely cognitive and exist in the eye and mind of individuals, they provide grounds for predictions about, and may generate behaviours towards others (Snyder et al, 1977). In addition, social perceptions guide and regulate our social interactions and behaviours with other people and correspondingly, the way they treat us is the reflection of our treatment of them (Bandura 1977, Mischel, 1968 cited in Snyder et al, 1977). This brief review of the large body

of literature on social perception and social stereotypes attempts to justify the following analysis of interviewee responses.

Interviewees' responses were analysed by identifying social stereotypes that can have a positive influence and encourage socialisation with new neighbours, and the ones that prevent these effects. It was asked whether neighbours' visible cognitive social stereotypes such as race, age, appearance, income and family structure encourage or discourage socialising. Fourteen out of seventeen interviewees mention that *behaviour and manners are more important* in encouraging them to socialise with their neighbours than visible cognitive social stereotypes. However, one person states that appearance is important, one person indicates cultural background and one age, as most important indicators in encouraging them to socialise.

P1 (visible stereotypes do not matter to him, it is important to have the ***personality*** *to welcome a new neighbour, noise prevents him from socialising)*

P2 (I don't like to go unless there is something to say, ***first greeting matters to her****)*

P3 (I say hi if I see them, doesn't matter to me, however she mentioned ***appearance*** *is important to many people)*

P4 (after a few weeks I will go and introduce myself, if they look rough I won't go)

*P5 (****age, renter or owner, and their occupation are important*** *to me, I usually go and introduce myself, I won't go if I don't feel they are* ***neighbourly and friendly,*** *or I get the feeling they want to keep themselves to themselves).*

P6 (If I pass them ***I say hi, if they didn't reply back to me*** *or they were rough with me it prevents me.)*

P7 (First I see the neighbour I say hi. ***Their behaviour*** *may prevent me going)*

P8 (…if they ***are noisy or not****?)*

P9 (Basically, you might be a little bit hesitant, it is okay to ***say hello and give them a wave and see what happens****. …Sometimes Australians, a lot of Australians have a tendency to not impose on other* ***person's privacy****, some other cultures may be different.*

…I personally find that ***Hijab*** *very confronting, myself,…You don't quite know what to do, you can't see what the person…, you know the* ***body language*** *is hardly picked up …*[57]*,* ***the burqa*** *type, the burqa set up to me is* ***like a prison*** *and I find that very confronting…*

P 10 (…It is all, I suppose, experience, isn't it. I've met many people in my life, the ***age, observation, instinct, and smile*** *are certainly important to me…I certainly watch the people and I like to* ***be friendly,*** *but I don't want to get very involved.*

P 11 (I normally say hello if I see them, cultural background definitely helps. ***Their manner and how hospitable*** *they are, whether* ***they smile when you greet them,*** *and they want to know about you.).*

P12 (… If they are similar to us, I mean ***age****…).*

P13 (To me doesn't really matter, ***teenagers*** *might be, but that's Perth growing up, isn't it?* ***Kids can be very noisy*** *too. …I* ***don't enjoy neighbours who threaten to go to the council over every little thing***[58]*…)*

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[57] *, not talking religion here because I know there are lots of Muslim people who wear scarf and this sort of stuff it is the brand wear all you ever see is the eyes and to me it's almost I know it's my own interpretation, the woman in its personal jail. That's how I see so I find it personally very confronting not because I have a problem with the person but I just feel like to me and this is purely me I'm sure the person doesn't necessary feel like that, they are walking around in their little jail cell. So I find that, not the Muslim faith, not the wearing of scarf and all that I don't have a problem with that, in fact in my school at Willetton we do have kids from different faith and they do wear scarf, I don't have a problem with the law but if somebody tries to wear that in the school people would find it very hard to handle.*

[58] *We do actually have one person on the street who is a bit like that. Every time that something happens she doesn't like she threatens to go the council and that sort of thing……I don't really mind who moved in family, single, older, younger people but I like to be able to get along with my neighbours, I think it worries more that sort of personality that when they don't like something they are threatening to go and complain to the council. We live in*

P14 *If for example this neighbour sells his house and a new neighbour comes in, what would encourage you to approach them and say hi and introduce yourself?*

*Get on **visual if it's simile or if it's not smile**, I've been in management so I can understand people want to talk to me or they don't want to talk to me. …*

***Age wouldn't, culture wouldn't, I think I'm open to** …. I wouldn't mind family with kids as long as their parents understand. There are kids, play up and down in this alleyway and I say hello to them.*

P15 *What do you think helps to get to know your neighbour better? If a new neighbour comes, how do you evaluate them, for example are they young or not, is a family with kids or not?*

*First thing, **they speak to you when you say hello**,* I don't care who you are but if you don't response back…

*So it is their behaviour which is important? yes, it is **their behaviour**, if you say hello, how are you, my name is such and such.* [59]

> *If you've lived in a quiet little home and only mixed with your own community such as Italian community you may think Vietnamese are odd but as soon as you do mix with different people, you find they are just people.*
>
> *I lived most of my childhood in a country town that had an **aboriginal reserve** on the outside, I spent 6 years sitting next to an aboriginal girl, was always smelly because they didn't have much facilities, but she was a nice kid. **My parents were***

---

community and it's give and take, if something is persistently happening then come and resolve it and don't go 'I'm gonna go complain to the council'. It is annoying… I guess perhaps how I've been brought up; my parents were very much like that as well, if they have any problem with someone's dog barking instead of complaining they'll go and see them, you know.

[59] *Because this person here [referring to next door neighbour] and her family, partly won't speak to us because we're renting Why do you think she doesn't speak? Because we are not good enough for her. That is only my perception of her.*

….people are not nice they are not nice regardless of their race and income. I worked in public dentistry so my work colleagues were multi-national, I worked in dental school so you have multi-national people coming in, you have overseas students coming in who often struggle with Australian society.

***encouraging me**. My father is from Northern Island Belfast, he had mix with different sort of people during the war, he said good people are good people; bad people are bad people it doesn't matter who they are.*

*P 16 …. see them outside, **wave and talk outside that's a gradual thing**. You don't know people; they may **be murderers!***

*P17 …Probably, in a sense, **security** for all of us. I don't mean they are dangerous, that's not the point. When you are looking in a neighbourhood the whole point of overlooking and passive security, being a planner you understand it is important if you know your neighbour…**Shake their hand and look into their eyes**, as simple as that. You can tell. You don't give too much away to begin with but the more you talk you get how engaging they are, **you get reasonably good feel whether or not they are decent people**[60]. … Makes no difference to us. Absolutely no difference to us, they are very elderly to very young whoever it is…*

The questionnaire results show that visible cognitive social stereotypes such as race, age, appearance, income and family structure seem to have an impact on the initial neighbours' contacts and their perceptions. Later on, it is the facial expression, manners and behaviours which encourage residents to continue their socialising with their neighbours.

[60] *So it's about looking after their needs as much as mine, I'm happy to go and look after your home if you go away and don't worry about it, turn your lights on and off, look after your pool whatever you want me to do and at the same level go and look if you got thieves coming across from the back, happy to help.*

Theme 5: Inclination towards local street informal socialising (Question 12)

In this question, interviewees were asked if they were aware of any social events in their street, and whether or not they have the inclination to organize or participate in such events. The results indicate that all 17 interviewees were unaware of the existence of any local street events in their neighbourhood. This strongly implies that a lack of sufficient communication between councils and residents, as Canning Bridge (one of the case studies) offers 'Friendly Neighbourhood Grants' for local events such as street parties but none of the interviewees knew about that. Only six out of 17 interviewees (35 percent) are keen to organize such events if council supports them, however all 17 interviewees are keen to participate if they are invited to a local street event. This shows that interviewees feel the need for socialising with their neighbours, but they do not have any inclination to organize such events.

In the context of neighbourhoods, the level of interactions with neighbours affects neighbourhood social capital and the sense of community feeling. Neighbourhoods with a lively social life have strong networks of friendships (Letki, 2008). Moreover, humans need to live safely and harmoniously together in a diverse community in order to maintain their individual well-being, and socialization is a process to meet this need (Grusec and Hastings, 2014). Socialization is an interactional process (Young, 1934) and a part of human development which fits individuals into society (Lacey, 1977). It is an ongoing complex process in life and can be influenced by people in the same vicinity and the media (Grusec and Hastings, 2014). Social skills, social understandings, and emotional maturity are factors that contribute to individual interactions with others (Maccoby, 2015). Therefore, a socially active neighbourhood requires residents with a high level of social skills. Any local event that can help people to get together and practice their social skills is beneficial for individuals and community well-being.

Some quotes from interviewees explain the necessity of such local street events. Person 5 looks at local street events as a way to unify the society and lessen prejudice.

> *P5: ... I think people are often reluctant because they only think sometimes they **don't have things in common** on the same street.*
> *Are you interested in organizing it? I think at the moment it wouldn't be at top of our list [our time is limited] to organize but if someone did it and it was on our Saturday lunch or something like this we'd definitely go*[61]*…*

Person 9 thinks that such local street events break the ice and change the dynamics quicker.

> *P9: Are you interested in organizing such local street events? Yes, that sounds fantastic, what that does, I'm talking many years ago, what it does, you actually get to know or get to meet some of the neighbours that you have already met they get to know you, you have a laugh, you have a beer, BBQ whatever, and all of a sudden it changes the whole dynamics, because it breaks the ice. That's the actual issue as I said earlier it is **about breaking the ice**, knowing how far we got. For example I wash my car on his front lawn and then I spray his lawn for weeds, it's a two way thing.*[62]

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[61] *That's interesting to fund such events, the benefit there is that you have more unified society, more likely to keep an eye on each other, to cooperate in environmental issues.*
If these guys [referring to Chinese neighbour] came to that [street event] I would definitely try to talk to them and so we could break the ice, and then they feel included in the neighbourhood. When you are out here in your garden it is nice to talk to your neighbour even if it is the only thing that you have in common, depends on what kind of person you are…we should integrate in a society while keeping our original cultural roots.
For example that Chinese neighbour may think there is a white guy someone doesn't want me in this country and probably someone who thinks that Chinese are going to take over the world and he wants me to go home…
Maybe they had a bad experience? Equally, when you have a bad experience with anyone you shouldn't generalise, but most people do. Most people don't think very much and they use prejudice as a short cut.

[62] *I think the idea of having a party and people getting to know each other is really good, whereas Australians have a problem, if you had one group which for reasons of religion or whatever didn't want to know anybody else ...it takes time to build up friendship, but one street show can do it quicker. It would be a good thing for every city to encourage because it is breaking down those barriers which is very important, while the barriers are perceived they stay there but to break down the barriers is very important, it is easy for me because I have worked in multicultural situation most of my life, and I generally don't have a problem but people who don't have that would find it difficult.*

Person 9 also thinks food can be a good way of breaking the barriers.

> *Do you think it helps the city to be socially connected?*
>
> *I think something like that most definitely would, actually the more I think about it the more I like the idea because* ***encouraging people to get to know each other is critical,*** *I think having a good community if you have people* ***who are isolated in their own little boxes, very little interactions I think that can be quite destructive*** *especially if people of different ethnicity are involved because then there is* ***distrust****. What* ***you don't know, you fear*** *or you* ***distrust*** *or you* ***don't like****. One of the ways I think the Australian people as people had the barriers broken is through* ***food****. The average Australian loves Asian food, all different kinds of Asian food. We just love the food from different cultures; we can have street party people can bring out their own different food so it is another way of breaking down the barriers.*

Person 11 who is from non-Anglo background, thinks her charity work can be a way to start a get-together at local street level in order to get to know more neighbours.

> *P11: … I get a lot of people from different parts of Perth come to take my bread, some come from Canning Vale… they drive all the way to pick up my bread. I was thinking maybe I should have* ***coffee outside*** *so when they are coming for bread we just sit down in my carport, everybody comes for the bread, sit down around and have a chat, lot of people are coming too, Italians, I have an Austrian friend, I have a few chairs, we sit down and* ***we have a chat****.*
>
> *… I feel that I come to know what kind of* ***culture*** *they are, for example Italians are very family-oriented and they love people, they love to help people, Austrians as well, …some people you know just* ***break that***

wall *they build another one around them, they take one brick at a time, they still want to keep that distance.*[63]

Person 14 thinks that most of his neighbours are *introverted* which discourages him from making an effort to socialise with them.

P14: … when I first arrived four years ago I got chatting to these people across here and I said we should all have telephone numbers so if anything happens we can speak to each other.
This neighbour there at the time and I said …do you feel like being a secretary and organizing this telephone numbers, she said I'd rather not. She did not want to promote the idea of us all ***mixing together***[64]*…*

Person 16 thinks that in a *diversified environment* it is hard to organize such events.

*P16: Do you have any street event with your neighbours? No. A*ll diversity of groups of people, I don't think he [referring to a neighbour] drinks, or that one.
Are you interested in doing that? It is a good thought but I said no
Why? People are busy with their kids, grandkids, it is hard to organize people
If one neighbour invites you are you interested in going? Yes.

Person 17 thinks that his wife's effort to socialise with their Australian neighbours didn't work as usually the neighbours don't reply. He is Australian

[63] *Why do think they want to keep the distance?*
I think because it is upbringing, they've been taught that we immigrants, we are different to them
Do you have any Australian friends? Very few.
Even After 25 years? Very few, I can count on my fingers.
Do you invite them to come to your home for a dinner? I used to but not anymore because now I live alone, so when I was a couple, yes
Do you want make friends (Australians) than what you have? Yes

[64] *We had an event organized by Peet [the development company] one Saturday afternoon very close to the station and we made pizzas, we made our own pizzas. Therefore, you get to know everybody, so it was rainy so we were in this confined area so we as neighbours were speaking to each other we had some people from other areas but none of my neighbours were there! When I see these people are introverted why should I organize such event! You can say they disinclined to do that…if you are talking to somebody it is good, I have two children and they are not sociable as I am …you have to talk to people, you get something back from something you give.*

and his wife is Indonesian. He thinks Asian and Australian cultural habits of socialising are very different.

> *P 17: …… it takes a lot of effort but what I notice is that Australians really don't want to put in effort, my wife's been saying, she put in a lot of effort when we came here … but you don't get it reciprocated.* [65] *…*

Most of interviewees mention reasons such as having a busy life for their unwillingness to organize small local street events. Some of them think that in a diversified street with people of different cultural backgrounds these events may not work as expected, because people have different eating and drinking habits or beliefs. Once again the issue of having different cultures was identified as a barrier for socialising.

Culture has a wide range of definitions, ranging from the 'man-made part of the environment' to the meaning system that individuals use to understand the world (Cole & Cagigas, 2010 cited in Chen et. al., 2014), it reflects the aspects that are shared and commonly endorsed by most people within the society (Chen et. al., 2014). In diverse societies like Australia, local street events may provide an opportunity for finding similarities between different beliefs and cultures, encouraging positive social interactions. These local events provide children and adults with an experience of new levels of informal interactions in a diversified neighbourhood context.

The more similarities people find among themselves, the less they become reluctant and gain more confidence in initiating socialising and knowing their neighbours, rather than keeping themselves to themselves. They become better attached to their local street and neighbours, develop more positive attitudes than negative ones and become less prejudiced. Local street events may give choices to people who want and are inclined to socialise with their neighbours and get to know them. As the results suggest, many

[65] *Perth is a new city, …the migration pattern will change the people interact……We've been very outgoing, first we came here we had all friends around we cooked and all rest of it, dinners, they didn't reply as the same way, different Australian standard, Asian standard: I'll do everything for you then you do the same for me, doesn't seem to work in Australia.*

interviewees are inclined to participate rather than organize such events. Yet it is a positive sign, and local authorities need not invest in big events, rather small local events can build a sense of community.

Summary of the chapter:

It was hypothesised that a desirable dense neighbourhood would include elements of both a physical and social nature. Questionnaire outcomes identified that social diversity was the most negative feature perceived among the range of factors raised. In order to study the reasons behind this negative perception, the next stage of data collection incorporated qualitative in-depth interviews that were conducted with interviewees from all the case study areas in order to identify opinions and drivers regarding their response to social diversity. Further questions were designed to study social relations of interviewees with their immediate neighbours and investigate whether the experience of neighbours' interactions impact the desired perception of a dense neighbourhood.

Interviewees' comments appeared to reflect the level of current informal and formal socialising within their communities was not at a level to override commonly held stereotypes regarding such factors as; ethnicity, neighbours' personality, their manners and age.

Without a sense of community, a sense of closeness to neighbours, and a culture of neighbourliness, dense neighbourhoods do not appear to be seen as desirable communities in which to live. Individuals were perceived to be different from one another and such differences were only seen to be capable of being overcome through a common belief in the value and practice of community formation.

While dense neighbourhoods are seen by planners as 'places', that will deliver social, economic and environmental benefits the findings of this research raise serious doubts as to whether they provide the building blocks of a sense of community that is considered essential in forming a *desired* 'genius loci', ambience, atmosphere, and a genuine character of 'place'.

CHAPTER 11

Conclusions

Introduction:

The study aimed to investigate the underlying reasons for community resistance to densification in an Australian context. Community opposition is one of the major obstacles that may constrain a planning decision making process. It can delay projects that aim to fulfil sustainable urban growth objectives, such as the need for new and diverse housing supply. By introducing Transit Oriented Developments, Perth, like other Australian cities, aims to increase housing density within 10 minutes walking distance of train stations, integrating transit and land uses.

However, during planning decision making processes the introduction of new dense developments is very often not welcomed by established communities that are being proposed as a site for changes in planning and development approaches. Such resistance is often labelled by the pejorative; 'NIMBY reaction'. This study endeavoured to move beyond such negative simplifications, and sought to investigate the socio-psychological reasons behind community concerns through a study of people's perception of a *desired dense* place or neighbourhood.

It was found that density is usually quantified in planning policies, and applied to built forms outcomes and the more general physical qualities of a place. However, the concept of community *desirable density* was found to go beyond the physicality of a place and included the social features such as social qualities of a place encapsulating lived experience in a lived space. Importantly social features were not seen as limited to community infrastructure such as provision of parks or community centres. Rather it was seen to encompass the experience and quality of social interactions among residents - the concept of neighbourliness.

It was identified that in the community consultation processes preceding densification strategies the possible social experience outcomes of the development were not discussed. While it may be impossible for planners to guarantee a desirable social environment for future and existing there were opportunities to lessen negative perceptions and to respond to underlying concerns about prospective residents.

Further, social relationships among neighbours and feeling a sense of closeness to the neighbours were seen as contributing factors in creating a desired social character, desired ambiance and desired lived experience.

In the study through a *desirable dense* neighbourhood framework (figure 4.1), three case studies were investigated in the Perth context. Three dimensions were considered in the selection of case studies: distance from CBD, demographic characteristics and density targets (as per the Activity Centre category in State Planning Policy 4.2). The aim was to obtain

information about the significance of certain variables in defining a community's desired level of density. The outcomes of the study do not reveal extreme differences between the case studies but highlight the fact that a high proportion of residents living in the catchment area of train stations are prepared to accept moderate increases in residential density. Construction of medium-density dwelling types such as terraced or townhouses, single or double storey grouped dwellings, and low to medium–rise apartment blocks were considered favourably.

When comparing the study outcomes to George Seddon's (1972, p.256) statement from the 1970s, that a fully detached house is the preference of the most Western Australians, it shows that dwelling preferences have changed over time and medium density has replaced the detached housing as a preferred housing form for many household types. This preference for medium density was also identified by another Western Australian study, Rowley et al. (2012). Seddon (1972) indicated that medium density was a potential positive combination of density, privacy and independence. This position matched the comments from respondents of medium-density housing in this study. Comments included the opinion that medium-density dwelling types are a compromise between increasing density and saving land for a sustainable future, while maintaining the current desired lifestyle on a smaller size than single storey detached housing. Seddon (1994, p.34) also stated that '(t)he free standing house with space before and behind has been the Australian dream, but that too is changing'. However, it does seem that the unpopularity of apartments for some Western Australians, particularly families, has not changed much from Seddon's time as has been confirmed in the outcomes of this study and the investigations of Rowley et al. (2012). This trend may also change in the future; Seddon (1994) seems unsure whether the change is for better or worse, or both, but he states that the generously sized old back yard which has been an important part of Western Australian culture may become 'a threatened species'.

The survey outcomes also reflected that social qualities of a dense neighbourhood, also directly affect its desirability. *Having a diverse mix of people* was seen as the main negative outcome of densification as identified by the surveyed communities. The views toward social diversity range from objections to people of different cultural background (especially from non-Anglo background), to people of different income groups. It also includes concerns about perceptions regarding the increase in social problems such as anti-social behaviours and crime.

Furthermore, in interviews, fear of the unknown was identified as the common root of negative perception towards social diversity. It was revealed that the lack of neighbourly feeling and of strong social connections among current immediate neighbours may pave the way for negative perceptions towards new residents in future dense developments. Such a lack of social connection allows residents' perceptions to be influenced by media and existing social stereotyping. While an individual's character and experience will affect their perception, it was found that a lack of quality and respectful social connections with their immediate neighbours further affected their perception of unknown future occupants.

The following sections discuss these outcomes further.

A. Medium-rise dense development: a balanced option for the respondents

In identifying physical and social features of a dense neighbourhood, a *desirable dense* neighbourhood framework (Figure 4.1) was developed to seek community opinions. Surveys were conducted in three case studies in Perth: Canning Bridge, Cannington and Wellard. The aim of the surveys was to encourage the existing residents to conceptualise the type of high-density development that they think would make their neighbourhood a physically and socially desirable place in which to reside. Respondents in all three case studies expressed a preference for dwelling types that were seen to be more inclined towards medium-density (grouped-dwellings and town houses),

without any shared or common spaces. However, the preferred medium density built form of the respondents in Canning Bridge, was 2-3 storey town houses, in Cannington single or double storey grouped dwelling and in Wellard both built forms.

While respondents were well aware of proximity to transport and accessibility to services as benefits of TOD areas, they were not prepared to trade-off their preference for their own lot and house to access these benefits. There was resistance expressed to multi-storey housing based on preferences. Apartment complexes of more than 4 storeys were overwhelmingly seen as an undesired dwelling type.

In relation to housing attributes which provide for comfortable living inside a home or unit within a dense area, the important features were having good quality noise insulation, having privacy, access to natural light, adequate storage space, and secure parking and entrance. Regarding preferred dense neighbourhood features, medium density housing was stated as the preferred option by majority of respondents in all case studies. The popular medium density dwelling built form to be *seen* in Canning Bridge is 2-3 storey town houses, in Cannington town houses and grouped dwellings and in Wellard 2-3 storey town houses. For the social features and lived experience qualities of a *desired dense* neighbourhood, the survey results showed that in the Canning Bridge area (with the highest socio-economic indicators), having a ‘diverse mix of people’, ‘different housing types’ and ‘increasing the chance of meeting more people’ were the most *undesired* features of a dense neighbourhood.

Even in Cannington, characterised by middle-income respondents and diverse culture, having a ‘diverse mix of people’ in the area and ‘increasing the chance of meeting more people’ remain the least desired features. In Wellard, the new TOD developed area, having a ‘diverse mix of people’ and ‘different architecture style within the precinct’ were identified as the most unpopular features by the respondents. The following diagram depicts the findings (Figure 11.1).

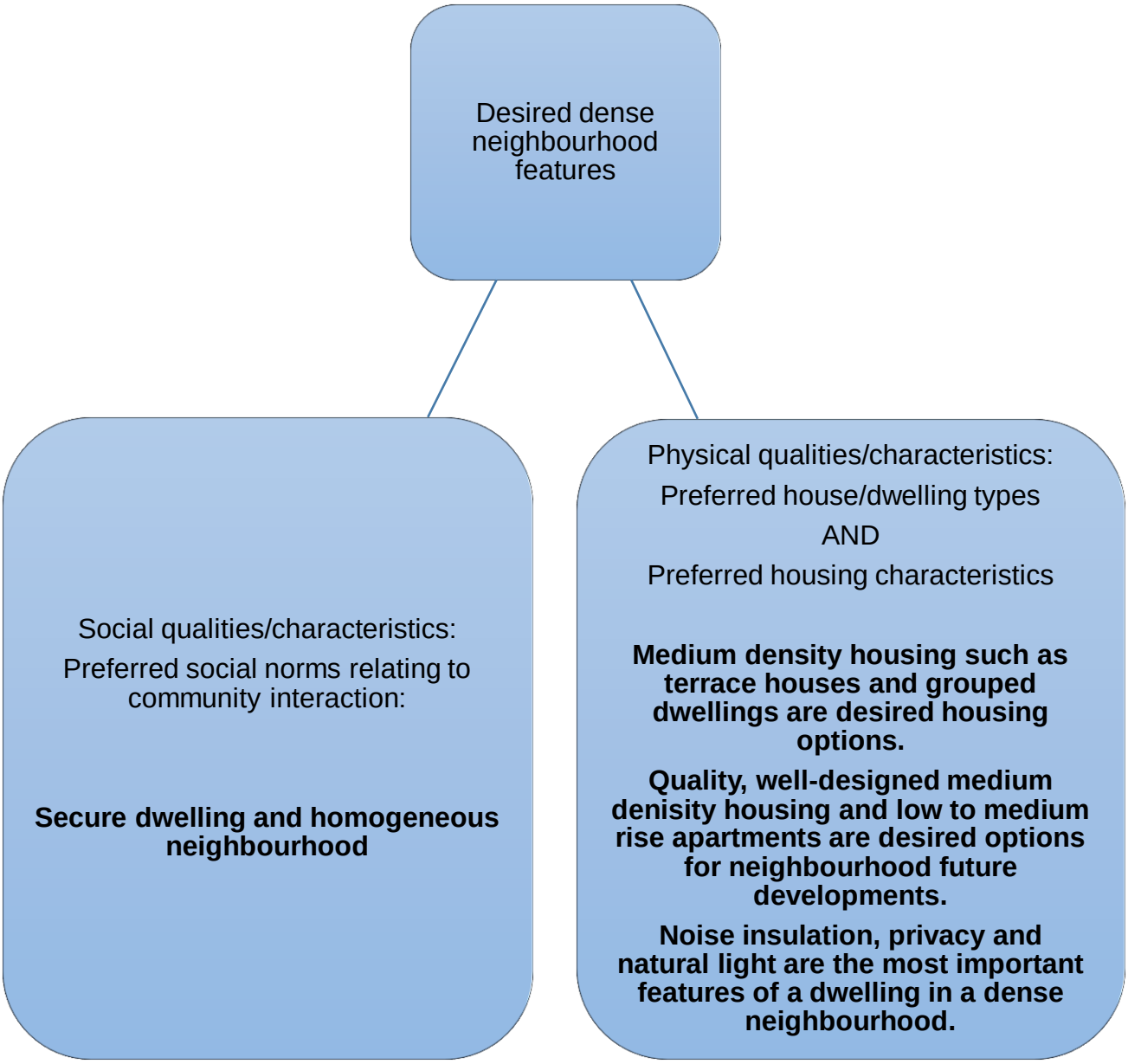

Figure 11.1: Diagram of the study’s major findings

B. Social diversity, the most undesired feature

'Crimes', 'anti-social behaviours', 'low socio-economic demographics' and 'different culture' were words used frequently to describe residents' views of the most undesired feature of a dense neighbourhood - 'a diverse mix of peoples'.

In Canning Bridge, more than thirty percent of respondents disagree that having 'diverse mix of people' benefits a dense neighbourhood. Associating 'diversity' to 'crime', 'burglaries', 'anti-social behaviours', 'public housing', 'affordable housing' and 'multi-cultures' reflects the perceived undesirable social features or qualities of a dense neighbourhood. In Cannington, more than twenty percent of respondents understand 'diversity' as a source of 'racial problems', 'welfare housing' and 'crowding. In Wellard, seventeen percent of respondents relate 'diversity' to 'crime', 'different cultures' and a 'diverse socio-economic demographic' which may cause 'more harm than good'.

While it may be argued that the majority of respondents, agree with 'diversity' feature in the study it is the level and intensity of the minority views that have the potential for escalating community opposition to a development via their power connections and resources (Davison, 2016) and later on causing delays for fulfilling objectives of sustainable growth in cities (Rice, 2009; Rowley and Phibbs, 2012; Cook et al., 2012; Davison et al., 2013; Weller and Bolleter, 2013; Ruming, 2014; Hedgcock and Brunner, 2015). Negative social views were also stated as one set of the factors in escalating community opposition in particular to affordable housing developments. Davison (2016) notes:

> … submitters [residents who submit their complaints to a council regarding a development] would label themselves "taxpayers" or "solid citizens" while simultaneously **disqualifying prospective residents** from social acceptance by associating them, in contrast, with **crime, worthlessness and antisocial behaviour**. Underlying these sorts of views were concerns

> that both the submitter's **safety and lifestyle** were **threatened** by the planned development. (Davison et al, 2016, p. 392)

When the majority of respondents' residential choices such as preferred, or 'desired' dwellings are put next to the most undesired feature of a dense neighbourhood, it can be argued that the preferred housing choice is seen as a compromise to avoid potential future social conflict with prospect neighbours/residents. Alternatively it could reflect a lack of interest in engaging in community formation with incoming residents and a resistance to spontaneous social interaction with new residents. The *fear of living in diverse communities* and a reluctance to live in close proximity to 'unknown' socio-economic groups and cultures, seem to escalate the negative perception towards dense developments. This may also demonstrate the proportion of respondents' viewing a place (such as a neighbourhood) as a bounded, settled and homogenous entity such that they take action to protect it by orchestrating resistance towards a dense re/development.

When social diversity is viewed as an undesirable socio-psychological character at a neighbourhood level, this then spills over into more general concerns about living in cities (Massey, 1995, Ruming, 2014). Ruming (2014) argues large proportion of residents in Sydney have concerns towards urban densification outcomes at both a metropolitan and suburban level. This reinforces the importance of Massey's (1995) argument regarding the need to re-imagine places and neighbourhoods in our cities. Places (Figure 11.2) that have a changing (unsettled) nature; are meeting places in a globalised world, where activities and identities intersect, rather than being settled and enclosed (Massey,1995, p.53; Easthope,2009).

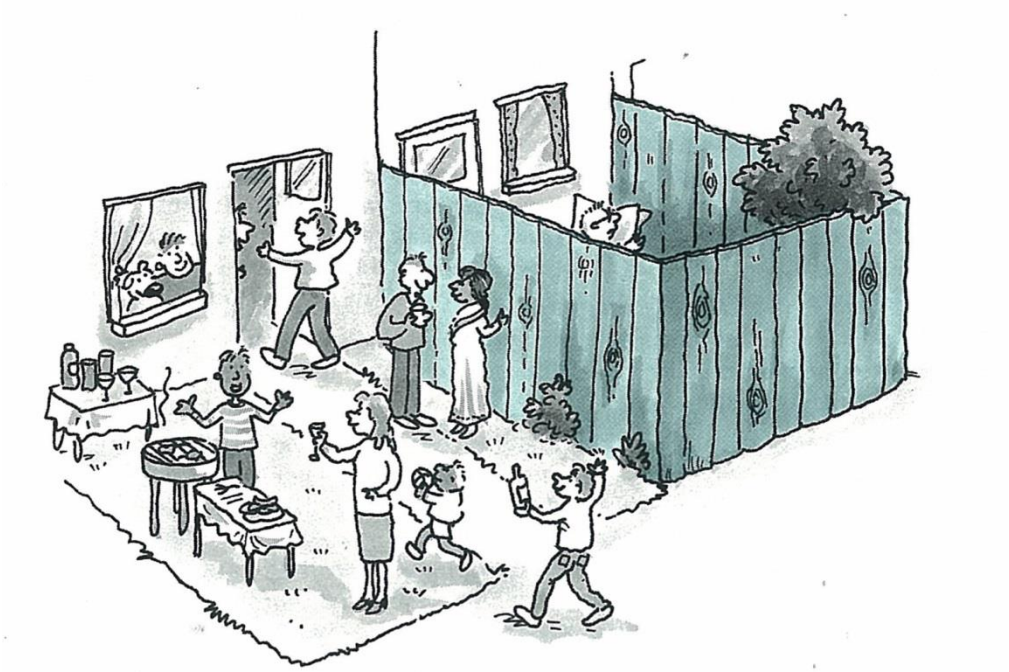

Figure 11.2: Contrasting place as security with place as a meeting-place (Massey, 1995, p.59)

Massey (1995, p.79) argues imagining places as settled entities requires purified (homogenous) communities; they are established identities which filter out *threats*. *Fear* and in particular 'fear of the unknown' was indicated by interviewees when explaining the negative views towards social diversity. This link between *contact* and *perception of threat* were discussed by Stephan and Stephan (1985) and Forrest and Dunn (2011). It was indicated that in the absence of contact, people will not have sufficient knowledge to judge a group with different socio-economic or cultural background as a realistic threat (Stephan and Stephan, 1985; Forrest and Dunn, 2011). In chapter ten, it was noted that the interviewees' low level of face-to-face contact with their current neighbours corresponds to negative views towards social diversity.

> …community requires face-to face interaction among members within a plurality of contexts. To understand other people and to be understood by them in our concrete individuality, we must not only work together but play together, take care of children together, grieve together and so on (Roberto, Unger, 1975 cited in Massey, 1995, p.80)

C. Contribution and further research

This study contributes to the discourse concerning high-density living in following ways. Firstly, it explores the concept of density in the literature, and the way in which it is defined and used in various disciplines. While in the planning process density is measured by numbers (the number of dwellings per unit area), by contrast people and the community perceive these numbers in a psychological context. Such different approaches may lead to the creation of negative perceptions toward dense developments and ultimately leading to community opposition during the planning decision process.

Secondly, assigning community opposition to NIMBY fears undermines the legitimacy of genuine fears about future development processes and forms. It is for this reason that this study has taken a socio psychological approach to encompass the NIMBY concept. It proposes a new way to look at community resistance. This lead the study to conceptualise the idea of a *desirable dense* neighbourhood framework, outlining the preferred physical and social features of a *desirable dense* neighbourhood. Further, homes and neighbourhoods were considered as places where residents' lived experience influence their perceptions. Thus, interviews were conducted to pursue attitudes towards social diversity.

Finally, the study recommended a study of existing community's preferences for future planning projects prior to the initiation of official consultation process. This could result in development proposals that are consistent with community preference and in turn delivers an expedient and genuine community engagement process.

D. A way forward

The negative perception of social diversity prompted further investigation in this research. It highlighted that a socio-cultural context plays an important role in achieving desired planning outcomes. In a city which is progressing toward more compact living for various planning reasons, the culture and attitudes of its residents need to be more effectively engaged in order to embrace the realities of higher-density living. This includes the management of communal spaces, respect for diverse socio-economic groups and cultures, and patience in the community formation process.

While interaction between people and neighbours may result in understanding differences and lessening the fear of the unknown, this will not be achieved if existing suburban cultures of privacy and containment continue to drive TOD development outcomes. It is concluded that from the survey and interviews analysis of the three case studies that the current level of socialising (the neighbours' current lived experience) will challenge the ability to effectively experience a *desired dense* neighbourhood.

Often the fear of crime and insecurity in multicultural societies like Australia, results in further issues such as racism against newcomers (Wise and Velayutham, 2009; Forrest and Dunn, 2011). This can be seen at the neighbourhood level (Wise and Velayutham, 2009), reflecting the existing social problems in wider society. Residents may use issues of character, identity or simple physical attributes as a stated basis of their concerns about denser living. Furthermore, issues such as their concerns towards 'diversity' may escalate community opposition for a change in an area and further develop perceptual prejudices

The way residents 'get along' (have positive contact) or 'rub along' (Watson, 2006, p.2 cited in Wise and Velayutham, 2009, p.21) in their shared spaces such as their neighbourhood (their contact zones), may foster or damage their everyday relationships. Those relationships shape their experience -the

socio-psychological component of an individual's perception. 'Fear of the unknown', whether it is symbolic or realistic, is a result of such social lived experiences and individual's level of knowledge. While the latter is a personal journey, the social experience can be enhanced by encouraging positive social contacts at the neighbourhood level.

Consequently, community development strategies may need to be more street-based in order to build a strong sense of community (positive lived experience) among immediate neighbours. Currently, council community development strategies are mainly orientated around large events which necessarily doesn't enhance immediate neighbours' social interaction. Large events may attract significant numbers of participants, but fail to address the quality of micro relationships within those communities. Small street get-togethers may have the potential and be more effective than large events for establishing long lasting cross-cultural contacts, increasing the individual's level of knowledge of various cultures and finally reducing prejudice.

It may be argued that community development outcomes take time to nurture and impact on a community's perception. Therefore, community consultation processes need to address concerns around population growth, prospective residents of new developments, and the change in socio-economic characteristics of an area that may be an outcome of redevelopment. Concerns such as what the dominant household structure will be (family, couple, single); the dominant tenure of development (owners or renters); and the likely income brackets of households are usually not discussed in community forums and yet they have been found to be central to the individual's valuation of community characteristics.
Furthermore, increasing community's tolerance capacity is a crucial element in the success of any infill development.

> Tolerance of diversity involves respect for those who have different ways of life, different norms and habits from oneself. It does not necessarily mean

> agreeing with such people, but means that the differences are not seen as a barrier to cooperation.' (Black and Hughes, 2001, p.104)

What is intended to be emphasized here, is that the 'neighbourly feeling' described in earlier chapters, is lagging behind the urban policies promoting dense living. Being neighbourly belongs to a set of values that are encouraged in a democratic society. It is not merely about co-existence where people are indifferent to difference, but rather a form of toleration that embraces co-inhabitation (Donald, 1999 cited in Wise and Velayutham, 2009, p.40). It is about 'togetherness' and cross-cultural engagements which are happening in our everyday life through public spaces or 'micro publics', such as workplaces, schools, colleges, youth centres, sport clubs, community centres, community gardens, child-care facilities and local sporting teams (Amin, 2002; Sandercock, 2003 cited in Wise and Velayutham, 2009, p.40). However, in everyday life, local streets are neglected and forgotten as one of the important spaces where engagement with immediate neighbours takes place. Although Valentine (2008, p.322 cited in Wise and Velayutham, 2009, p.40) indicates that everyday encounters do not ensure a culture of tolerance, local street neighbourly get-togethers have the potential for meaningful contact, helping marginalised groups to participate (Wise and Velayutham, 2009, p.41) and feel that they belong to their neighbourhood community.

> The feeling of community means living in a space where one recognises people as 'one's own' and where one feels recognised by them as such (Levin, 2015, p.40).

Neighbourhoods and local streets are extremely important places in this globalised world to experience cross-cultural encounters[66].

[66] In her book, Iris Levin (2015) discusses how migrants reflect their cultural identity through their dwelling design and the way it is perceived by the others living next to them. Levin (2015) argues that some built forms construct a negative depiction of the immigrants' presence in the city, portraying them as abnormal and illegitimate. She refers to (Levin, 2015, pp.19, 20) 'monster-houses', extra-large houses built by migrants from Hong Kong in Shaughnessy Heights, a wealthy suburb of Vancouver, Canada, and 'Mediterranean-ised-houses', in Earlwood, a suburb of Sydney, Australia, where post-war migrants settled.

In a multicultural society such as Australia where heterogeneous cultures shape the social features and qualities of neighbourhood lived experiences, the level of tolerance and openness to strangers becomes more critical as it builds the moral dimension of community strength (Black and Hughes, 2001). Cox (1995) believes that 'true' social cohesion must be participatory and inclusive. Any social cohesion based on exclusivism is a sign of weakness, and ultimately leads to distrust or even violence within communities (Black and Hughes, 2001)

In the last paragraph of the thesis, I honour British politician, Jo Cox who gave her life in achieving such true social cohesion in our societies.

(Source: http://www.womanandhome.com/news-and-entertainment/539864/the-world-pays-tribute-to-labour-m

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APPENDIX ONE

QUESTIONNAIRE

Curtin University

Faculty of Humanities
School of Built Environment

Architecture & Interior Architecture
Construction Management
Urban & Regional Planning

GPO Box U1987
Perth Western Australia 6845

Telephone +61 8 9266 2282
Facsimile +61 8 9266 2711
Web http://humanities.curtin.edu.au/schools/BE/

Survey Information Sheet

Dear resident

The following survey is part of the study which is investigating the aspects of a dense good quality environment. The required time for filling the survey is less than 15 minutes. Participation is completely voluntary. You can skip any question that you feel unconformable to answer. Information collected will not be used to identify individuals and will be kept confidential.

Currently, every city is planning for sustainable future growth. Similarly in Perth, Department of Planning is following the strategy to create activity centres. The purpose of these centres is to provide centres where services and transport are within walking distance from homes. This research aims to investigate how community demands and planning goals for Perth's future growth can be achieved.

Therefore at Curtin university of Technology, Department of Urban and regional Planning, this research project is seeking to people's preferences for future developments in transit oriented precincts (800 meters from train stops).

To assist with this research I request you to fully complete this form and return it within paid envelope provided by **Friday 30th of November 2012.**

It may be easier for you to fill the online version of this survey and submit it.
Online version is available at:
https://www.surveymonkey.com/s/SN-CURTIN-NOV2012

If you require any further information please do not hesitate to contact:

Mrs. Shohreh Nematollahi
Research Student (PhD Candidate)
Department of Urban and Regional Planning
Curtin University of Technology
Phone: (08) 9266 7687
Email: shohreh.nematollahi@postgrad.curtin.edu.au

Dr. Reena Tiwari
Associate Professor (Supervisor)
Department of Architecture & Urban Planning
Curtin University of Technology
Phone: (08) 9266 4730
Email: r.tiwari@curtin.edu.au

Your assistance is highly appreciated.
Kind Regards

Shohreh Nematollahi

9) In what sort of home do you live?
   - Detached house
   - Single-storey villa/unit
   - Townhouse
   - Multi-storey Terrace house
   - Flat/apartment
   - Granny Flat/Ancillary dwelling

10) For how long are you living in your current home?
   - Less than 2 years
   - 2-5 years
   - 5-10 years
   - More than 10 years

TRANSIT ORIENTED DEVELOPMENT

11) Are you familiar with Transit Oriented Development?
   - Yes
   - No

The government is planning to develop/redevelop lands around some Perth's train stations to create precincts known as Transit Oriented Development (TOD) which would extend about 800 meters from a train station (a ten minute-walk) and could include shops and offices with a variety of housing types such as town houses and apartments. You are currently living within this area, if you consider continue living in this area with new redevelopments would you please answer the following questions:

12) Which of the following issues do you think will make the area within 800 meters of the train stations more **attractive** to live?

Please specify do you **agree** or **disagree**, if **disagree**, explain in few words why?

	agree	disagree	If **disagree**, why?
Walking to services such as shops and public transport			
Availability of different housing types in the precinct (including apartments, terraces, villas, units			
A diverse mix of people in the precinct			
Different architecture style within the precinct			
High quality landscaping of the precinct including streets and plazas			
Well-designed biking lanes			
Well-designed pedestrian plazas and paths			
High quality public open space area such as BBQ and kids play area			
More pedestrian friendly environment than car oriented			
Increasing the chance of meeting more people in the area			

13) If you were living in a townhouse or apartments within 800 meters of train station which of the following **features** would you consider being important?
Please indicate, on a scale of 0-10 (0=not important, 10=extremely important)

	0	1	2	3	4	5	6	7	8	9	10
Balcony											
Privacy											
Opening to a view											
Natural light											
Noise insulation											
Storage space											
Communal facilities (open space such as kids play area)											
Architectural style											
Front/back yard											
Number of floors											
Secure parking											
Security of entrance											
People who live there											

Continues ....

Transit oriented development focuses mainly on increasing housing density. Increasing density does not necessarily mean high-rise towers rather it means over time we may see, smaller, more compact houses such as two or three storey townhouses on small lots, and apartments. With this definition please answer following questions:

14) What kind of housing would you prefer to **live** in if future developments occur?

Please tick one of the following options below and explain in few words **why you have chosen the option**?

	2 or 3 storey townhouses	**Why?**
	Apartments up to 4 storeys	**Why?**
	Apartments up to 6 storeys	**Why?**
	Single or double storey detached house	**Why?**
	Single or double storey grouped dwellings	**Why?**

15) What kind of housing would you prefer to **see** in the area if future developments occur? Please tick one of the following options below and explain in few words **why you have chosen the option**?

	2 or 3 storey townhouse	**Why?**
	Apartments up to 4 storeys	**Why?**
	Apartments up to 6 storeys	**Why?**
	Single or double storey detached house	**Why?**
	Single or double storey grouped dwellings	**Why?**

YOUR CURRENT JOB STATUS

16) What is your job status?

- o Full time
- o Part time
- o Self-employed
- o Causal employed
- o Unemployed
- o Retired

17) What is the usual total household annual income? (Please do not deduct income tax, superannuation, or health insurance)

- o less than $40,000
- o $40,000 to $90,000
- o more than $90,000 up to 120,000
- o more than 120,000

18) Are you happy to assist this research if further survey is required? If yes, would you please provide us with any contact details that suits you.

Email:

Mobile:

Phone:

Thank you for completing the questionnaire. Please return it via provided envelope.
We are grateful for your valuable information and the time you spent.

APPENDIX TWO

INTERVIEW CONSENT FORM

Curtin University

Faculty of Humanities
School of Built Environment

Architecture & Interior Architecture
Construction Management
Urban & Regional Planning

GPO Box U1987
Perth Western Australia 6845

Telephone +61 8 9266 2282
Facsimile +61 8 9266 2711
Web http://humanities.curtin.edu.au/schools/BE/

Title of Study: Desirable Dense Built Up Environment?

Introduction and Purpose
My name is Shohreh Nematollahi. I am a PhD student at Curtin University, enrolled at Department of Urban and Regional Planning, under Associate Professor Reena Tiwari (Email: r.tiwari@curtin.edu.au) supervision in the School of Built Environment. I would like to invite you to take part in my research study, which focuses on community demands in regard to Activity Centers planning framework.

Procedures
If you agree to participate in my research, I will conduct an interview with you at a time that suits you at your local public library as it is a quiet safe and close place to your home. The interview will involve questions of your perceptions of social diversity in your neighborhood. It should last about half an hour to one hour. With your permission, I will record the interview (audiotape or notes). This will enable to record the information accurately to be used for transcription purposes only. If you agree to being audiotaped but feel uncomfortable at any time during the interview, the recorder can be turned off at your request. Or if you don't wish to continue, the interview can be stopped at any time.

Benefits
There is no direct benefit to you from taking part in this study. It is hoped that the research will guide policy makers in deeper understanding of residents' demands for future redevelopments.

Risks/Discomforts
You are free to decline to answer any questions you don't wish to, or to stop the interview at any time.

Confidentiality
Your study data will be handled as confidentially as possible. If results of this study are published or presented, individual names and other personally identifiable information will not be used.
To minimize the risks to confidentiality, we will take security measures such as keeping data in a safe storage.
When the research is completed, I may save the tapes and notes for use in future research done by myself or others. I will retain these records for up to 5 years after the study is over. The same measures described above will be taken to protect confidentiality of this study data.

Rights
Participation in research is completely voluntary. You are free to decline to take part in the interview. You can decline to answer any questions and are free to stop taking part in the interview at any time.

Questions
If you have any questions about this research, please feel free to contact me. I can be reached at
Phone: (08) 9266 3866
Email: shohreh.nematollahi@postgrad.curtin.edu.au.

Dr. Reena Tiwari
Associate Professor (Supervisor)
Department of Architecture & Urban PlanningCurtin University of Technology
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Human Research Ethics Committee (Secretary)
Office of Research and Development,Curtin University of Technology,
GPO Box U1987, Perth WA 6845
Phone: 9266 2784
Email: hrec@curtin.edu.au

CONSENT FORM

Desirable Dense Built Up Environment? (Approval Number BE-43-2014)

Principle investigator: Shohreh Nematollahi
School of Built Environment, Department of Urban and Regional Planning

1. I agree to be interviewed for the purposes of the study named above.
2. The purpose and nature of the interview has been explained to me, and I have read the information sheet as provided by the student.
3. I agree that the interview may be electronically recorded.
4. I understand I can withdraw at any time without prejudice.
5. Any questions that I asked about the purpose and nature of the interview and study have been answered to my satisfaction.
6. Any information which might potentially identify me will not be used in published material.

Name of interviewee_____

Signature of interviewee_____

Date_____

INTERVIEW THEMES

1) The questionnaires result show that among desirable features in a dense neighbourhood, having 'a diverse mix of people in the precinct' is the least desired feature. What is your opinion about it?

2) How long have you lived here?

3) Do you know your immediate neighbours? Family? Owners? Have little kids, teenagers? Working? Age? Cultural background?

4) How did you and your neighbours start to know each other?

5) Do you get on well with them?

6) Would you like to know them better? (for example have a short chat, having a meal together, inviting them for your kids birthday, etc.)? how often? what kind of activity?

7) What do you think helps you from getting to know your neighbours? (e.g. having things in common, local events and activities, having a playground or park close by; also – kids, age, cultural background.)

8) What do you think prevents you from getting to know your neighbours?
(e.g. family income, cultural background, tenants/owner, their kids.)

9) Are you involved in any local organizations and/or activities?
   Why not?
   Which organizations/activities?
   Does the involvement help you to connect with diverse people for example with different age, family structure or cultural background?

10) If a new neighbour comes, what are the things you are most interested to know about them? What things might encourage you get to know them? (age, income, having kids or teenagers, working?)

11) If a new neighbour comes, what things might discourage you get to know them?
(age, income, having kids or teenagers, working, tenants?)

12) Does your street have social events each year? Would you be interested in attending such events if they are organised to know your neighbours and socialising with them?

For example, city of Melville offers ‘Friendly Neighbourhoods grants’ of up to $250.00 available for individuals and community groups wanting to host events which help connecting local communities, welcoming newcomers to an area and encouraging community participation. Examples of things that can be funded include sausages, buns, condiments etc. for street parties, cost to print Friendly Neighbour cards to promote events, coffee van for a street event etc.
Would you be interested to organise such event? What about attending?